

DEPARTMENT OF RAILWAYS AND CANALS

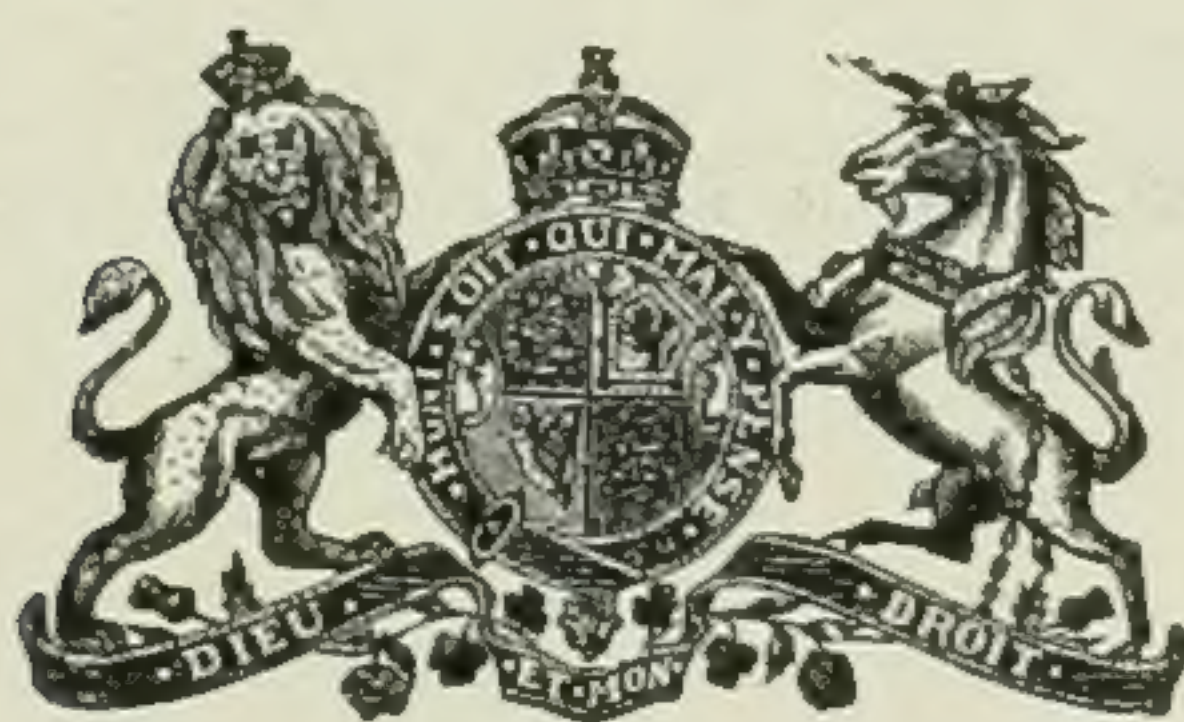
CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1910

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

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EXCELLENT MAJESTY

1911

[No. 20a—1911]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY,

The undersigned has the honour to present to Your Excellency the report on Canal Statistics for the year ended December 31, 1910.

GEO. P. GRAHAM,
Minister of Railways and Canals.

To the Honourable GEORGE P. GRAHAM,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1910.

I have the honour to be, Sir,
Your obedient servant,

A. W. CAMPBELL,
Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS,

February 15, 1911.

A. W. CAMPBELL, Esq.,

Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended December 31, 1910.

It will be observed that there was a further substantial increase in the volume of traffic through the canals of the Dominion. The freight transported amounted to 42,990,608 tons, as compared with 33,720,748 tons in 1909. This betterment of 9,269,860 tons was equal to 27·5 per cent.

The freight traffic of 1910 was distributed among the various canals as follows :—

	Tons.	Increase.
Sault Ste. Marie	36,395,687	8,534,442
Welland.....	2,326,290	300,339
St. Lawrence	2,760,752	350,123
Chambly.....	669,299	.....
St. Peter's.....	85,951	6,101
Murray.....	177,941	75,650
Ottawa.....	385,261	48,322
Rideau.....	134,881	43,107
Trent	46,263	.....
St. Andrew's.....	8,283	8,283
Total.....	42,990,608	9,366,367

It may be explained that St. Andrew's lock, which was constructed in 1909 to overcome the rapids by that name in the Red River near Winnipeg, appears in the list of canals for the first time. The traffic which it makes possible is between Lake Winnipeg and the city of Winnipeg.

In order that comparison may be made with preceding years, and, at the same time, a demonstration afforded of the rapid expansion of Canadian waterborne business, the figures relating to tonnage for the past decade are given :—

1901.....	5,665,259 tons.
1902.....	7,513,197 "
1903.....	9,203,817 "
1904.....	8,256,236 "
1905.....	9,371,744 "
1906.....	10,523,185 "
1907.....	20,543,639 "
1908.....	17,502,820 "
1909.....	33,720,748 "
1910.....	42,990,608 "

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The growth during the first five-year period was equal to 65 per cent, and during the second period 308 per cent.

The business of the past three years was distributed among the various canals as follows :—

	1908.	1909.	1910.
Sault Ste. Marie.....	12,759,216	27,861,245	36,395,687
Welland.....	1,703,453	2,025,951	2,326,290
St. Lawrence.....	2,009,102	2,410,629	2,760,752
Chambly.....	503,276	752,117	669,299
St. Peter's.....	72,015	79,850	85,951
Murray.....	25,901	102,291	177,941
Ottawa.....	258,527	336,939	385,261
Rideau.....	89,640	91,774	134,881
Trent.....	81,690	59,952	46,263
St. Andrew's.....			8,283

The classes of commodities which constituted the tonnage of the past two years with the volume of each, are shown in the following table :—

Canals.	Vegetable Products.	Animal Products.	Manu- factures.	Produce of Forest.	Produce of Mines.	Total.
1909.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Soo.....	2,832,388	277,887	710,360	71,129	23,969,481	27,861,245
Welland.....	850,018	71,848	506,489	186,614	410,982	2,025,951
St. Lawrence.....	718,461	68,146	472,656	509,157	642,209	2,410,629
Chambly.....	780	19,612	9,560	599,330	122,835	752,117
St. Peter's.....	3,794	14,867	7,626	8,423	45,140	79,850
Murray.....	628	890	50,035	655	50,083	102,291
Ottawa.....	668	8,788	64,153	232,025	31,305	336,939
Rideau.....	1,268	4,101	42,642	26,727	17,036	91,774
Trent.....	664	490	1,880	55,086	1,832	59,952
Total.....	4,408,669	466,629	1,865,401	1,689,146	25,290,903	33,720,748
1910.						
Soo.....	2,530,396	304,729	862,526	100,613	32,597,423	36,395,687
Welland.....	982,346	60,880	516,333	154,737	611,994	2,326,290
St. Lawrence.....	856,611	83,754	497,007	564,328	759,052	2,760,752
Chambly.....	783	23,288	21,834	496,119	127,275	669,299
St. Peter's.....	4,603	14,867	7,889	10,124	48,468	85,951
Murray.....	20	4,544	162,506	3,471	7,400	177,941
Ottawa.....	723	8,111	72,294	268,199	35,934	385,261
Rideau.....	1,433	3,576	76,299	40,026	13,547	134,881
Trent.....	298	765	8,672	35,849	679	46,263
St. Andrew's.....	1	153	177	7,952		8,283
Total.....	4,377,214	504,667	2,225,537	1,681,418	34,201,772	42,990,608

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The proportion of commodities by classes is shown in the following comparison for 1909 and 1910:—

	1909.	1910.
	Per cent.	Per cent.
Vegetable products.....	13·0	10·2
Animal ".....	1·5	1·2
Manufactures.....	5·6	5·2
Produce of forests.....	4·9	3·9
Produce of mines.....	75·0	79·5

TRANSPORTATION OF CANADIAN WHEAT.

The growth of the Canadian wheat trade has been reflected in the rising tonnage of the canal at Sault Ste. Marie. In order that the facts may be in mind, following is a statement of the volume of wheat which passed through that canal since it was opened for business in 1895:—

	Bushels.
1895.....	4,518,334
1896.....	19,314,234
1897.....	17,925,834
1898.....	9,746,600
1899.....	12,759,634
1900.....	9,292,034
1901.....	9,639,534
1902.....	27,912,500
1903.....	32,233,934
1904.....	29,794,100
1905.....	25,983,100
1906.....	34,389,300
1907.....	49,399,967
1908.....	58,574,034
1909.....	*48,047,833
1910.....	51,774,833

During the past year it became necessary, in the adjustment of statistical methods, to make a more or less thorough study with respect to the movement of Canadian wheat through the canal at Sault Ste. Marie. Errors had been made in the classification of wheat of Canadian origin, and it was important to ascertain the correct figures. The inquiry covered the years 1909 and 1910.

It may be explained, that up to 1908 it had not been the practice of this Department to identify the products of Canada or the United States when they passed through any of the canals. At Sault Ste. Marie this was the rule on both sides of the boundary. Hence, it was quite impossible to know the volume of Canadian wheat which came down from the West or to follow the course which it took. This was obviously a defect in our statistical work, and a change was made in 1908.

*For the first time represents Canadian wheat only. The figures of preceding years include American wheat which passed through the Canadian Canal.

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A further explanation is necessary. At Sault Ste. Marie there are two canals, one on the Canadian side of the line and the other on the American side.

Both canals are free, and the captain of a vessel may select whichever one he may at the moment prefer. On the Canadian side the origin of all commodities passed through the canal is recorded. On the American side an account it is understood, has been kept during the past two years of Canadian wheat taking that route ; but the facts are not officially made public. In any event, only the volume is ascertained. The subsequent movement of each cargo is not made a matter of record.

Using the corrected figures, the volume of Canadian wheat which passed through the Sault Ste. Marie Canal during the year 1910 was 1,553,245 tons, or 51,774,833 bushels. In 1909 the aggregate was 1,441,435 tons, or 48,047,833 bushels. In addition, 9,117,328 bushels of Canadian wheat passed through the American canal in 1909, and 5,321,446 bushels in 1910. Joining the shipments of Canadian wheat which passed through the two canals, the total was 57,165,161 bushels for 1909, and 57,096,279 bushels for 1910.

By a careful analysis of the ships' reports it was ascertained that the distribution of Canadian wheat which passed through the Canadian Canal at Sault Ste. Marie in 1909 and 1910 without reference to official figures appearing elsewhere and here corrected, was as follows :—

	1909.	1910.
	Bushels.	Bushels.
Fort William to Montreal.....	10,517,266	13,185,370
" " Georgian Bay.....	13,384,400	12,753,200
" " other Canadian ports.....	10,149,633	9,603,400
" " Buffalo.....	12,841,334	15,693,363
Duluth to Montreal.....	520,000	315,000
" " Buffalo.....	528,200	224,500
" " Georgian Bay.....	28,000	
" " other Canadian ports.....	79,000	
Total	48,047,833	51,774,833
Through American canal.....	9,117,328	5,321,446
Grand total.....	57,165,161	57,096,279

As has been said, the course of Canadian wheat which passed through the American canal at Sault Ste. Marie cannot be followed. With respect to that which passed through the Canadian canal, however, the following summary illuminates the facts given in the preceding paragraph.

	1909.	1910.
	Per cent.	Per cent.
Fort William to Montreal.....	21·9	25·5
" " Georgian Bay.....	27·9	24·6
" " other Canadian ports.....	21·1	18·5
" " Buffalo.....	26·7	30·3
Duluth to Canadian ports.....	1·3	·6
" American "	1·1	·5

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With regard to the situation as a whole, it will be seen that 62 per cent of the Canadian wheat which came down from the West in 1910 followed Canadian channels from start to finish. The remaining 38 per cent passed in part or wholly through American channels.]

It will be observed that last year 30.3 per cent of the wheat which was shipped eastward by water from the provinces of the Canadian west found an outlet by way of Buffalo. This took place in spite of the fact that both distance and rates were in favour of the St. Lawrence route. The freight rate which prevailed during the season was from $3\frac{1}{2}$ to $4\frac{1}{2}$ cents per bushel from the head of Lake Superior to Montreal. From either Duluth or Fort William to New York the rate was from 4 to 5 cents, according to the season. It would seem that the popular conviction with respect to the controlling force of distance and rates in the handling of a commodity like wheat, which is supposed to yield most easily to such influences, is not entirely sound. Other conditions may act as a countervail. They did in this instance to the extent indicated.

It may help to a better understanding of our inland waterborne trade if the conditions which caused the diversion to Buffalo of over 30 per cent of the Canadian wheat which passed through the Sault Ste. Marie canal in 1910, while only 25 per cent was delivered at Montreal, are briefly presented. It may not be considered improper to discuss the basic facts of the matter, frankly and fairly in a report of this character. On the surface it would appear reasonable to expect that a cargo of wheat taken aboard a vessel at Fort William, and consigned to Liverpool, would seek the nearest ocean port. Montreal happens to be that port. Moreover, the lake freight rate to Montreal last year was from a half to over one cent per bushel less than the combined vessel and rail rate to New York, via Buffalo. At Buffalo the entire cargo must be transferred to cars or to barges. Only a small percentage of the 15,693,363 ^{bu. of} ~~tons~~ of Canadian wheat which is definitely known to have gone to Buffalo in 1910 was carried by water to New York. The rail route commands the trade.

The conditions which operated against the St. Lawrence route in 1910, as in preceding years, were: First, the character of the vessels which ply between the head of Lake Superior and Buffalo; second, the ocean freight rates; third, the Atlantic insurance rate; and fourth, return cargo. The United States steamers engaged in the grain trade of the Great Lakes are much larger than those which can pass through the 14 feet waterway provided by the Welland and St. Lawrence canals. Such vessels can carry 450,000 bushels of wheat without lightering at Sault Ste. Marie. With a draft of 21 feet they cannot pass beyond Lake Erie. Many of them, too, are owned by the railways operating between Buffalo and New York. They have an advantage in the economical transportation of grain as against smaller steamers.

The ocean rates out of New York are lower than out of Montreal. The difference is from $\frac{3}{4}$ to $1\frac{1}{2}$ cents per bushel in favor of the former port. This situation is due to a number of causes, to which allusion need not be made here. The fact alone is of immediate importance.

The rates of marine insurance for vessels sailing out of Montreal during the season of 1910 were as follows: From the opening of navigation to 15th September, 25 cents per \$100; from October 16th to 31st, 45 cents; from 1st to 15th November, 60 cents:

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from 15th November to close of navigation, 75 cents. From New York and Boston the rates were from 12½ to 15 cents, according to the class of steamer, throughout the entire year.

The fourth consideration—return cargo—is of relatively large importance. It was ascertained that United States steamers were able during the season of 1910 to obtain westbound cargo at Buffalo, chiefly coal, to the extent of a little more than 50 per cent. of their capacity. The return cargo obtained by vessels at Montreal did not exceed 25 per cent. So far as vessels bound for Fort William were concerned, it did not reach 15 per cent.

The distribution of Canadian wheat which passed through the Sault Ste. Marie Canal during the seasons of 1909 and 1910 disclosed another fact worthy of attention. Of the entire traffic, 43 per cent was carried to Georgian Bay and other Canadian ports west of Lake Erie. Thence it was transported by rail eastward, chiefly to Montreal. It is sufficient to give the statistical facts, without comment, which this movement has created. The vessel freight rate from Fort William to Georgian Bay has averaged about 2 cents per bushel for the past two years. During the middle of the season of 1910 it was from 1 to 1¼ cents. To this must be added the rail rate from Georgian Bay to Montreal, which was from 3½ to 5 cents per bushels, including the cost of elevation at both terminal points.

SAULT STE. MARIE CANAL.

The canal at Sault Ste. Marie forms the chief gateway of the inland waterborne traffic of the Dominion. Eighty-four per cent of the aggregate canal business of 1910 passed through the lock at that point. Having regard to freight tonnage, the eastbound traffic represented last year over 87 per cent of the total, showing that the movement of commodities is principally in one direction. Iron ore has for some years held first place in the freight list of eastbound cargoes, while wheat comes next. The up, or westbound, movement consists, to the extent of about 70 per cent, of coal. In view of the important position of the Sault Ste. Marie Canal, the following comparative summary of statistical facts is of interest:

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Years.	CANADIAN VESSELS.		U. S. VESSELS.		Total No.	Vessel Tonnage.	FREIGHT TONNAGE.		LOCKAGES.	DAYS OPEN.	Remarks.
	No.	Tonnage.	No.	Tonnage.			Canadian.	United States.			
1895.....	609	126,534	583	623,092	1,192	749,626	.....	.....	699	87	Canal first operated Sept. 9, 1895.
1896.....	2,070	589,407	3,066	3,805,749	5,136	4,395,156	.....	.....	3,042	218	
1897.....	1,909	495,546	2,359	3,391,936	4,268	3,797,482	.....	.....	2,604	238	
1898.....	1,811	403,931	1,864	2,353,699	3,675	2,757,630	.....	.....	2,526	243	
1899.....	2,000	558,552	1,769	2,389,457	3,769	2,948,009	.....	.....	2,610	239	
1900.....	1,790	577,310	1,291	1,617,438	3,081	2,194,748	.....	.....	2,205	238	
1901.....	2,796	775,151	1,408	1,674,597	4,204	2,449,748	.....	.....	2,910	246	
1902.....	3,080	1,366,930	1,964	3,237,372	5,044	4,604,302	.....	.....	3,418	264	
1903.....	2,711	1,615,939	1,640	3,146,807	4,351	4,762,746	.....	.....	3,242	256	
1904.....	2,637	1,555,042	1,325	2,675,663	3,962	4,230,705	.....	.....	3,022	241	
1905.....	3,970	1,803,288	1,692	3,734,349	5,662	5,537,637	.....	.....	4,031	255	
1906.....	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124	.....	.....	4,152	253	
1907.....	3,217	2,154,688	3,132	9,961,281	6,349	12,115,969	.....	.....	4,506	238	
1908.....	3,289	2,603,232	2,204	7,035,655	5,293	9,638,887	2,092,231	10,666,985	3,667	235	Origin of cargo first shown.
1909.....	2,597	2,988,936	3,734	14,850,738	6,331	17,839,674	3,366,495	24,494,750	5,046	240	
1910.....	2,744	3,173,494	5,228	20,187,704	7,972	23,361,198	3,345,619	33,050,068	6,110	248	

GENERAL STATISTICS.

STATEMENT of total Freight passed through the Canals for the following years.

Years.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		Total TONS.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up. and Down.		
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1887	336,648	1,154,424	138,692	202,563	151,805	192,528	86,374	457,482	713,519	2,006,997	2,720,516
1888	355,165	1,146,260	138,127	174,239	214,407	223,429	81,611	428,357	789,310	1,972,287	2,761,597
1889	384,777	1,156,306	122,295	198,497	267,224	300,193	81,243	603,311	855,529	2,258,367	3,113,896
1890	369,593	1,137,011	144,368	133,188	216,813	320,324	58,709	533,021	789,505	2,123,542	2,913,047
1891	370,120	1,155,247	103,814	123,193	248,188	307,958	50,747	543,259	772,869	2,129,657	2,902,526
1892	327,560	1,322,137	173,538	135,787	241,034	302,983	47,396	481,301	789,528	2,242,208	3,031,736
1893	351,706	1,344,822	214,076	141,602	247,329	385,769	54,912	806,773	868,023	2,678,966	3,546,989
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	568,866	780,522	2,162,193	2,942,715
1895	264,824	1,070,046	286,191	91,177	362,637	608,778	62,285	590,140	975,937	2,360,141	3,336,078
1896	293,353	1,619,668	259,659	100,519	1,197,245	3,536,054	117,535	867,040	1,867,792	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,142	4,369,314	108,787	968,203	1,322,216	7,238,751	8,560,967
1898	263,989	1,819,887	187,253	98,967	829,508	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	266,364	115,133	732,030	2,129,988	125,678	727,111	1,420,280	4,865,644	6,225,924
1900	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	703,563	1,255,586	3,758,107	5,013,693
1901	340,805	1,686,094	268,449	201,231	507,204	1,801,696	177,715	682,065	1,294,173	4,371,086	5,665,259
1902	529,085	2,064,480	308,212	342,484	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197
1903	648,150	2,391,366	430,174	408,500	863,337	3,130,816	373,456	958,018	2,315,117	6,888,700	9,203,817
1904	606,737	2,047,499	511,887	276,578	699,784	2,778,903	483,795	851,053	2,302,203	5,954,033	8,256,236
1905	736,976	2,252,514	549,365	347,089	607,228	3,183,895	577,528	1,137,146	2,451,097	6,920,647	9,371,741
1906	1,238,929	2,355,855	627,094	234,919	991,508	3,595,256	482,239	997,385	3,339,770	7,183,415	10,523,185
1907	1,034,733	3,162,158	891,692	226,138	1,991,959	11,060,878	819,369	1,356,712	4,737,753	15,805,886	20,543,639
1908	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820
1909	1,608,659	3,504,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,744,349	27,976,399	33,720,748
1910	2,312,740	3,861,272	600,144	661,436	3,323,822	29,530,163	995,749	1,705,282	7,232,455	35,758,153	42,990,608

* Sault Ste. Marie canal opened in August, 1895.

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years :—

CANADIAN VESSELS.

YEARS.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.		
1887	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,013	1,395,932	1,452,020	18,991
1888	1,113,290	1,120,774	158,209	34,368	1,252		22,553	189,876	1,295,304	1,345,018	17,661
1889	1,285,574	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	19,393
1890	1,314,127	1,250,999	229,478	32,909	929	351	14,003	296,676	1,558,537	1,580,935	20,655
1891	1,356,518	1,287,168	201,758	28,642	550	292	16,350	244,176	1,575,176	1,560,278	19,246
1892	1,517,249	1,460,505	177,136	29,184	1,466	394	14,659	201,374	1,710,510	1,691,455	21,177
1893	1,548,094	1,422,326	170,186	26,787	1,172	10	17,037	248,442	1,736,489	1,697,565	20,757
1894	1,319,792	1,260,907	217,635	19,298	2,177	5	6,394	222,696	1,545,998	1,502,906	19,027
1895	1,258,848	1,165,683	253,693	13,383			5,899	285,553	1,518,440	1,464,619	17,136
1896	1,547,757	1,420,342	200,292	5,234	157		4,115	271,809	1,752,321	1,697,385	20,972
1897	1,629,192	1,482,951	215,785	11,378			3,533	297,898	1,848,510	1,792,227	21,466
1898	1,704,661	1,609,255	215,393	4,927	499	518	6,805	255,927	1,927,358	1,870,627	21,509
1899	1,865,643	1,774,789	242,817	32,436	925	3,691	42,290	345,980	2,151,675	2,156,896	23,579
1900	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	21,755
1901	1,615,952	1,587,221	279,007	82,541	3,300	2,908	97,332	312,003	1,995,591	1,984,673	20,860
1902	1,914,167	1,840,787	241,356	97,492	1,874	2,164	101,335	286,520	2,258,732	2,226,963	22,198
1903	2,061,258	2,088,969	340,383	143,614	7,018	3,082	188,896	379,612	2,597,555	2,615,277	23,767
1904	1,838,260	1,907,886	299,245	159,740	5,175	4,223	237,910	319,661	2,380,590	2,391,510	21,851
1905	2,059,097	2,031,766	312,773	188,138	11,820	3,191	262,401	322,005	2,646,091	2,545,100	23,726
1906	2,271,776	2,264,476	292,705	155,595	24,420	5,506	202,276	309,567	2,791,177	2,735,144	25,498
1907	2,561,948	2,661,317	337,822	129,246	9,153	7,331	238,172	383,922	3,147,095	3,181,816	28,833
1908	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	29,040
1909	3,335,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,043	3,835,535	22,507
1910	3,891,613	3,504,463	315,656	122,688	95,151	89,618	287,555	627,046	4,587,975	4,343,815	25,387

Statement of the Tonnage of Canadian and United States Vessels for the following years :

UNITED STATES VESSELS

YEARS.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS		TOTAL TONS.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1887.	16,265	17,925	38,857	56,708	143,730	140,562	52,793	98,849	251,645	315,035	566,680	3,883
1888.	14,304	26,801	42,425	50,047	177,714	156,095	49,778	114,613	284,221	347,566	631,777	3,921
1889.	21,125	26,449	55,996	50,732	253,088	206,567	56,249	160,442	386,458	444,190	830,648	4,542
1890.	10,390	16,345	38,156	36,397	248,418	231,728	39,697	97,266	336,661	381,736	721,397	3,364
1891.	10,357	29,851	70,665	27,727	283,013	238,818	31,083	146,602	395,118	442,998	838,116	3,602
1892.	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,596	454,199	871,795	3,928
1893.	10,752	34,303	214,047	33,741	351,994	282,721	50,994	307,740	627,787	658,508	1,286,295	4,585
1894.	18,528	30,201	139,720	20,830	302,562	269,788	37,406	192,992	498,216	513,811	1,012,027	4,131
1895.	8,838	24,768	138,554	17,712	262,240	216,542	32,295	185,730	441,927	444,752	886,679	4,427
1896.	11,496	19,093	195,228	21,953	357,205	292,559	40,116	290,370	604,345	623,775	1,228,126	4,650
1897.	14,666	18,367	269,430	17,618	338,938	277,345	26,341	347,698	649,375	661,028	1,310,403	4,675
1898.	12,142	9,541	233,524	32,880	308,878	305,464	32,331	336,004	586,875	683,889	1,270,764	4,264
1899.	17,217	18,044	172,897	30,002	1,605,887	1,156,503	51,902	234,336	1,846,848	1,438,885	3,285,733	6,101
1900.	13,316	17,824	157,689	30,443	1,208,725	741,276	45,741	190,971	1,425,471	983,514	2,408,985	5,502
1901.	11,587	18,706	177,169	28,124	922,464	1,044,707	54,895	224,622	1,166,115	1,316,159	2,482,274	5,634
1902.	13,622	37,871	187,826	70,641	1,756,948	1,654,672	123,257	241,602	2,081,653	2,004,786	4,086,439	6,433
1903.	14,014	24,168	265,208	65,247	1,736,187	1,689,414	106,401	335,836	2,121,810	2,114,665	4,236,475	6,695
1904.	10,122	16,890	275,721	39,993	1,464,316	1,475,085	68,081	305,697	1,818,240	1,837,665	3,655,905	6,253
1905.	19,743	19,444	364,985	81,876	2,350,494	1,701,704	104,536	456,459	2,836,758	2,259,483	5,096,241	7,085
1906.	34,306	15,324	356,259	78,561	2,738,623	1,928,131	115,675	418,436	3,244,863	2,440,452	5,685,315	7,319
1907.	57,349	72,018	304,591	72,048	4,739,053	5,376,050	205,769	623,941	5,463,767	6,141,067	11,604,834	9,328
1908.	54,587	32,705	442,773	124,120	2,975,624	4,142,392	218,835	536,163	3,685,819	4,835,320	8,521,139	7,489
1909.	263,592	109,407	442,176	200,202	4,178,378	10,429,414	243,750	621,903	5,098,196	11,361,126	16,459,322	9,996
1910.	119,222	50,498	428,702	305,330	5,509,417	14,488,565	299,462	576,164	6,356,803	15,420,494	21,777,297	11,462

CAPITAL EXPENDITURE.

The statement following brings the capital expenditure on the Canals of the Dominion down to March 31, 1910. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville Canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow :—

Canal.	Construction.		Enlargement.		Total.	
	\$	c.	\$	c.	\$	c.
St. Peter's	648,547	14			648,547	14
Lachine.....	2,589,532	85	9,786,178	93	12,375,711	78
Beauharnois.....	1,636,690	26			1,636,690	26
St. Lawrence River and Canals.....	18,442	85	3,451,470	56	3,469,913	41
Lake St. Louis.....			298,176	11	298,176	11
Lake St. Francis			75,906	71	75,906	71
Cornwall.....	1,945,624	73	5,289,142	41	7,234,767	14
Williamsburg {	Farran's Point		877,090	57	10,485,611	69
	Galops.....		6,118,927	32		
	Rapide Plat.....		2,158,242	00		
	Williamsburg.....		10,696	26		
Welland.....	7,693,824	03	20,813,039	16	28,506,863	19
Ste. Anne's.....	134,456	51	1,035,759	12	1,170,215	63
*Carillon and Grenville	63,053	64	4,119,039	32	4,182,092	96
Culbute	382,776	46			382,776	46
Rideau.....	4,085,889	21			4,085,889	21
St. Ours.....	121,537	65			121,537	65
Chambly	637,214	66	43,786	43	681,001	09
Murray.....	1,248,946	71			1,248,946	71
Trent.....	7,873,501	09			7,873,501	09
Tay	489,599	23			489,599	23
Sault Ste. Marie.....	4,868,532	60			4,868,532	60
Soulanges.....	7,126,135	61			7,126,135	61
Total	42,884,960	77	54,077,454	90	96,962,415	67

The cost of maintenance during the fiscal year 1910 was \$1,608,390.54.

Details of tonnage by canals and commodities will be found in the tables subjoined.

I have the honour to be, Sir,

Your obedient servant,

J. L. PAYNE,
Comptroller of Statistics.

CANAL STATISTICS

FOR

SEASON OF NAVIGATION, 1910

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland Canal, from ports west of Port Colborne for a period of twenty-nine years is as follows:—

QUANTITY PASSED DOWN TO MONTREAL.		To Ports in Ontario.	Quantity from U. S. Ports to U. S. Ports.
	Tons.	Tons.	Tons.
1882.....	180,694		63,881
1883.....	186,814	10,650	121,876
1884.....	142,194	12,153	104,537
1885.....	96,569	11,909	117,346
1886.....	203,940	9,881	151,551
1887.....	185,034	11,838	134,868
1888.....	160,358	25,599	169,664
1889.....	267,769	19,075	213,766
1890.....	288,513	16,899	245,932
1891.....	295,509	6,805	202,710
1892.....	261,954	8,942	201,540
1893.....	501,806	25,555	222,958
1894.....	273,651	16,699	203,979
1895.....	231,491	32,096	133,823
1896.....	461,049	73,386	160,372
1897.....	* 560,254	53,257	157,756
1898.....	519,532	31,279	144,612
1899.....	332,746	40,197	68,011
1900.....	244,661	17,525	84,589
1901.....	151,566	13,732	83,370
1902.....	208,215	22,787	81,164
1903.....	351,936	29,062	111,828
1904.....	198,246	23,711	102,523
1905.....	341,431	42,061	129,270
1906.....	404,935	33,351	176,119
1907.....	635,573	42,032	163,295
1908.....	756,141	38,142	135,172
1909.....	652,742	40,238	129,587
1910.....	789,661	63,657	115,457

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 151,566 tons in 1901 to 789,661 tons in 1910, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 83,370 to 115,457 tons the same years.

1 GEORGE V., A. 1911

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 14 years, is reported as follows :—

	Tons.
For 1897.....	228,611
1898.....	293,391
1899.....	209,170
1900.....	229,624
1901.....	227,700
1902.....	263,861
1903.....	253,959
1904.....	154,625
1905.....	148,377
1906.....	386,963
1907.....	383,735
1908.....	285,262
1909.....	426,163
1910.....	

The quantity of the same articles passed down the whole length of the St. Lawrence Canals to Montreal for the same period was :—

	Tons.
For 1897.....	604,200
1898.....	575,097
1899.....	372,291
1900.....	295,928
1901.....	203,316
1902.....	242,225
1903.....	400,057
1904.....	220,076
1905.....	375,630
1906.....	449,673
1907.....	684,697
1908.....	776,374
1909.....	652,742
1910.....	789,661

Comparative shipments of grain by the St. Lawrence route, and Railways, are as follows :—

QUANTITY OF GRAIN TO SEA BOARD BY COMPETING ROUTES.

The quantity of grain and pease passed down the whole length of the St. Lawrence Canal to Montreal, is as follows :—

	Tons.
For 1909.....	652,742
1910.....	789,661
Showing an increase of	136,919

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways is reported as follows :—

	Tons.
For 1909.....	426,163
1910.....	
Showing	

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TRANSHIPMENT OF GRAIN.

The quantity of grain passed down the Welland Canal in Canadian and United States vessels to Kingston and Prescott for fifteen years is as follows :—

In Canadian vessels there were in—

			Tons.
1896, 196	cargoes, with an aggregate quantity of.....		227,912
1897, 180	"	"	229,265
1898, 166	"	"	224,021
1899, 162	"	"	221,306
1900, 325	"	"	183,200
1901, 112	"	"	132,558
1902, 131	"	"	175,514
1903, 170	"	"	218,840
1904, 115	"	"	174,121
1905, 167	"	"	239,418
1906, 205	"	"	344,605
1907, 255	"	"	427,813
1908, 355	"	"	598,941
1909, 308	"	"	550,276
1910, 383	"	"	679,358

In the United States vessels there were in—

			Tons.
1896, 158	cargoes, with an aggregate quantity of.....		217,978
1897, 197	"	"	285,847
1898, 339	"	"	464,852
1899, 167	"	"	205,571
1900, 259	"	"	163,575
1901, 135	"	"	123,229
1902, 135	"	"	136,652
1903, 219	"	"	273,986
1904, 118	"	"	150,359
1905, 235	"	"	273,344
1906, 178	"	"	269,800
1907, 263	"	"	413,087
1908, 271	"	"	330,514
1909, 174	"	"	272,291
1910, 182	"	"	295,714

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908 ; 87 Canadian and 9 American of 135,582 in 1907 ; 74 Canadian and 10 American of 108,734 tons in 1906 ; 96 Canadian and 18 American of 180,206 in 1905 ; 56 Canadian and 16 American of 116,095 tons in 1904 ; 56 Canadian and 18 American of 99,582 tons in 1903 ; 19 Canadian and 17 American of 34,804 tons in 1902 ; 23 Canadian and 2 American of 17,303 tons in 1901. 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891 ; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

1 GEORGE V., A. 1911

The quantity of grain transhipped at Port Colborne in 1909 and the four previous years was as follows : —

Articles.	1905.	1906.	1907.	1908.	1909.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	679,840	1,009,474	1,428,300	1,166,244	2,686,903
Corn	104,027	110,629	112,036		
Rye					
Oats		29,118	30,824	23,945	
Barley		2,103		56,544	22,216
Flaxseed			39,040	49,628	8,202

WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1910 was 2,326,290 tons ; of this quantity 44,771 tons was way or local freight.

There were 1,601,456 tons of freight passed eastward, and 724,834 passed westward.

East and West bound Through Freight.

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1910 was 2,281,519.

Of this quantity 1,557,283 tons were east bound and 724,236 west bound freight.

Of the east bound through freight, Canadian vessels carried 1,146,457 tons and United States vessels carried 410,826 tons ; and of the west bound through freight Canadian vessels carried 357,019 tons and United States vessels carried 367,217 tons, or a total of 1,503,476 tons for Canadian and 778,043 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1910 was 2,760,752 tons ; of this quantity 1,916,733 tons passed eastward and 844,019 passed westward.

East and West bound Through Freight.

The total quantity of through freight was 1,959,771 tons ; of this quantity 1,488,551 tons were east bound and 471,220 tons were west bound.

Way Freight.

Of the total quantity of (way) or local freight 428,182 tons were east bound and 372,799 tons west bound freight.

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THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows :

	Eastward, to Montreal. Tons.	Westward, from Montreal. Tons.
1896.....	480,077	10,050
1897.....	584,246	4,542
1898.....	538,108	4,436
1899.....	354,933	5,991
1900.....	288,251	6,217
1901.....	184,420	13,714
1902.....	250,475	25,289
1903.....	390,786	100,699
1904.....	278,328	71,512
1905.....	448,704	72,482
1906.....	554,231	96,791
1907.....	789,167	1,281
1908.....	864,926	3,472
1909.....	925,005	191,510
1910.....	1,170,139	172,360

THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of through freight passed eastward and westward through the Welland Canal, from United States ports to United States ports, for a period of fifteen years, was as follows :—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1896.....	385,695	267,518	653,213
1897.....	353,863	210,831	564,694
1898.....	277,023	210,516	487,539
1899.....	225,491	135,038	360,529
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225
1904.....	165,337	87,144	252,481
1905.....	190,547	112,549	303,096
1906.....	237,226	84,205	321,431
1907.....	218,997	177,660	396,657
1908.....	209,518	239,136	448,654
1909.....	196,838	248,581	445,419
1910.....	197,301	288,198	485,499

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows an increase of 40,080 tons as compared with the previous year ; and a decrease of 167,714 tons as compared with 1896.

1 GEORGE V., A. 1911

The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1910 inclusive.

Fiscal Year.	Aggregate number of Trips.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867.....	5,405	933,260	458,386
1868.....	6,157	1,161,821	641,711
1869.....	6,069	1,231,903	688,700
1870.....	7,356	1,311,956	747,567
1871.....	7,729	1,478,122	772,756
<i>Season of navigation.</i>			
1872.....	6,063	1,333,104	606,627
1873.....	6,425	1,506,484	656,208
1874.....	5,814	1,389,173	748,557
1875.....	4,242	1,038,050	477,809
1876.....	4,789	1,099,810	488,815
1877.....	5,129	1,175,398	493,841
1878.....	4,429	968,758	373,738
1879.....	3,960	865,664	284,043
1880.....	4,104	819,934	179,605
1881.....	3,332	686,506	194,173
1882.....	3,334	790,643	282,806
1883.....	3,267	1,005,156	432,611
1884.....	3,138	837,811	407,079
1885.....	2,738	784,928	384,509
1886.....	3,589	980,135	464,478
1887.....	2,785	777,918	340,501
1888.....	2,647	878,800	434,753
1889.....	2,975	1,085,273	563,584
1890.....	2,882	1,016,165	533,957
1891.....	2,594	975,013	553,800
1892.....	2,615	955,554	541,065
1893.....	2,843	1,294,823	631,667
1894.....	2,412	1,008,221	592,267
1895.....	2,222	869,595	463,779
1896.....	2,766	1,279,987	653,213
1897.....	2,725	1,274,292	564,694
1898.....	2,384	1,140,077	487,539
1899.....	2,202	789,770	360,529
1900.....	2,399	719,360	318,529
1901.....	1,547	620,209	274,019
1902.....	1,568	665,387	269,029
1903.....	1,787	1,002,919	370,225
1904.....	1,433	811,371	252,481
1905.....	1,595	1,092,050	305,096
1906.....	1,536	1,201,967	321,431
1907.....	1,982	1,614,132	396,743
1908.....	2,351	1,703,453	448,654
1909.....	2,433	2,025,951	445,419
1910.....	2,544	2,326,290	487,499

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The total quantity of freight passed through the several divisions of the Canadian Canal system during the season of 1910 is as follows :

	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Produce of Mines.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland.	688	154,737	516,333	611,994	1,042,538	2,326,290
St. Lawrence.	9,514	564,328	497,007	759,052	930,851	2,760,752
Chambly.	404	496,119	21,834	127,275	23,667	669,299
Ottawa	3,242	268,199	72,294	35,934	5,592	385,261
Rideau	2,124	40,026	76,299	13,547	2,885	134,881
St. Peters.	2,599	10,124	7,889	48,468	16,871	85,951
Murray.	149	3,471	162,506	7,400	4,415	177,941
Trent Valley. .	435	35,849	8,672	679	628	46,263
Sault Ste. Marie.	1,368	100,613	862,526	32,597,423	2,833,757	36,395,687
St. Andrews .		7,952	177		177	8,283

The total quantity of freight moved on the Welland Canal was 2,326,290 tons, of which 1,042,538 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,760,752 tons, of which 930,851 were agricultural products, and 497,007 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 385,261 tons ; of this quantity 564,328 tons were the produce of the forest.

1 GEORGE V., A. 1911

COMPARATIVE Statement of the Commerce through the United States, St. Mary's Falls Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1909 and 1910.

		Traffic for 1910.		Total Traffic for		Increase	Decrease.
		U. States Canal.	Canadian Canal.	Season of 1910.	Season of 1909.	Amount.	Amount.
Vessels	No.	12,927	7,972	20,899	19,134	1,765	
Lockages.	"	8,459	6,110	14,569	13,571	998	
Tonnage registered.	Net tons	26,506,986	23,361,198	49,868,184	46,779,137	3,089,047	
" freight	"	25,927,661	30,395,687	62,323,348	57,993,619	4,329,729	
Passengers	No.	33,536	33,291	66,827	60,546	6,281	
Coal hard	Net tons	1,109,533	601,208	1,710,741	1,422,671	288,070	
" soft.	"	8,319,072	3,508,357	11,827,429	8,586,321	3,241,108	
Flour	Barrels	1,856,756	2,831,260	7,688,016	7,103,533	584,483	
Wheat.	Bushels	17,505,949	68,396,300	85,902,249	112,839,716		25,937,467
Grain (excluding wheat).	"	14,945,290	23,855,747	38,601,037	47,493,636		8,692,599
Manufactured & pig iron.	Net tons	266,951	218,717	485,668	572,892		87,224
Salt.	Barrels	390,191	138,419	528,610	651,091		122,481
Copper	Net tons	121,438	35,806	157,244	127,212	30,032	
Iron ore.	"	13,075,362	28,440,952	41,516,314	40,023,414	1,492,900	
Lumber.	B. M.	58,507,000	44,646,650	603,253,650	552,003,300	51,250,350	
Silver ore.	Net tons						
Building stone		9,335		9,335	1,784	7,551	
Unclassified freight.	"	747,886	740,554	1,488,440	1,131,586	356,854	

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The United States canal was open to navigation during the season of—

1889.....	234 days	1900.....	238 days
1890.....	228 "	1901.....	230 "
1891.....	225 "	1902.....	256 "
1892.....	233 "	1903.....	249 "
1893.....	219 "	1904.....	223 "
1894.....	234 "	1905.....	245 "
1895.....	231 "	1906.....	249 "
1896.....	232 "	1907.....	233 "
1897.....	234 "	1908.....	231 "
1898.....	241 "	1909.....	236 "
1899.....	231 "	1910.....	224 "

The Canadian canal was open to navigation during the season of—

1895.....	87 days	1903.....	256 days
1896.....	218 "	1904.....	241 "
1897.....	238 "	1905.....	255 "
1898.....	243 "	1906.....	253 "
1899.....	239 "	1907.....	238 "
1900.....	238 "	1908.....	235 "
1901.....	246 "	1909.....	240 "
1902.....	264 "	1910.....	248 "

The average number of vessels passing per day through the two canals for the season of 1910 was over eighty-eight.

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A TABLE showing the total tonnage of the undermentioned articles moved Up and Down

Year.	VEGETABLE FOOD.						Other Articles. †
	Floor.	Wheat.	Corn.	Barley.	Oats.	Rye.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*.....	45,674	313,825	120,599	20,951		904	1,937
1872	26,651	239,998	254,902	6,035	7,752	64	2,745
1873	30,665	355,847	180,169	8,225	1,194	3	3,777
1874	24,019	413,212	181,151	18,871	5,954	513	8,677
1875	13,964	253,835	103,749	35,751	3,383	917	6,337
1876	15,778	201,906	144,591	18,455	24,496	1,454	3,198
1877	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878	9,121	191,982	185,931	10,979	3,088		2,302
1879	10,710	274,570	144,506	4,655	1,239	440	2,444
1880.....	12,679	242,020	163,738	17,772	477	1,016	1,480
1881	9,959	127,832	101,075	24,509		1,844	2,086
1882	12,261	215,056	54,799	20,126	611	3,226	403
1883	13,471	152,794	182,269	10,436	731	1,642	10,983
1884	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885	13,334	124,206	117,536	15,801	1,116		1,912
1886	19,474	154,169	219,442	1,595	4,911	564	14,657
1887	23,949	221,927	114,938	9,574	12,050		12,533
1888	16,983	160,963	194,886	5,906	26,629	811	13,608
1889	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890	14,461	118,002	327,394	10,830	27,728	1,549	20,876
1891	13,517	198,658	185,180	8,113	52,959	65,888	28,042
1892	17,046	232,019	192,548	6,433	37,173	9,392	32,815
1893	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894.....	33,628	270,993	169,233	28,353	27,962	567	60,673
1895.....	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899	11,625	197,732	204,004	2,907	24,037	923	18,460
1900	10,968	137,800	163,509	4,035	41,055	3,538	14,815
1901	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903	25,998	259,031	210,758	14,656	7,911	4,904	13,994
1904	35,049	165,138	116,444	27,171	16,582		13,184
1905	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908	23,209	732,131	127,492	31,172	33,423	6,067	21,668
1909	38,763	590,196	140,902	23,151	75,135	33	30,221
1910.....	41,152	587,493	229,980	21,575	136,233		18,149

* Fiscal. † Apples, meal of all kinds, pease, potatoes.

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through the Welland Canal, during a period of forty years, ended December 31, 1910.

HEAVY GOODS.							
Total.	Railway Iron.	Other Iron.	Salt.	Iron and Salt having paid full tolls on St. Lawrence Canals.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
503,860	46,806	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	.....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	.....	6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	.....	753	1,027	28,047	202,384	8,138	240,349
367,177	127	1,610	2,567	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	.....	243,690
591,409	.....	3,072	159	977	203,608	.....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	.....	201,261
720,183	1,444	11,722	799	734	162,336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	.....	8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488	.....	15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213,033
650,172	3,747	8,493	100	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267,212	25,040	317,143
975,672	.....	35,726	429	.....	316,921	18,004	371,080
898,401	.....	87,025	.....	.....	377,681	33,301	498,007
1,034,582	.....	57,581	.....	.....	577,491	34,311	669,383

1 GEORGE V., A. 1911

B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of forty years, ended December 31, 1910.

VEGETABLE FOOD.

Years.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other. Articles. †	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	44,110	310,090	119,541	3,920	....	680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
1878	8,854	188,106	185,931	1,217	3,088	....	2,100	389,296
1879	10,588	271,545	114,276	803	1,196	....	2,387	430,795
1880	12,467	240,601	162,891	....	477	....	1,418	417,853
1881	9,655	121,393	103,075	252	.....	6	1,371	235,752
1882	12,205	205,876	54,797	537	....	1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	114,090	117,536	618	1,116	.....	1,628	248,310
1886	19,418	146,151	218,897	....	4,891	.....	14,581	403,928
1887	23,940	210,755	114,938	1,711	12,050	.....	12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894	33,628	270,514	169,233	28,353	27,962	....	60,587	590,277
1895	43,895	202,636	164,894	8,689	18,236	.....	46,435	484,785
1896	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897	9,025	322,903	390,615	14,173	25,127	8,483	44,651	815,067
1898	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901	18,937	151,325	67,756	7,119	28,281	2,961	14,021	290,400
1902	22,282	223,499	67,647	7,418	11,223	4,079	12,912	349,060
1903	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904	35,046	164,515	116,444	27,171	16,582	....	13,157	372,915
1905	38,512	247,599	180,921	55,432	36,072	1,711	9,882	570,129
1906	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,509
1908	23,187	730,751	127,402	31,172	33,423	6,667	21,668	974,270
1909	38,763	590,074	140,902	23,151	75,135	33	30,206	898,264
1910	41,152	587,493	229,980	21,575	136,233	.....	18,149	1,034,582

*Fiscal. †Apples, meal all kinds, pease, potatoes.

C. — TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of forty years, ended December 31, 1910.

YEARS.	VEGETABLE FOOD.							HEAVY GOODS.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other Articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	30,681	211,085	91,149	2,942	.....	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1872	10,482	124,695	89,761	1,391	7,400	.....	608	234,337	24,040	13,239	49,843	95,741	59,401	224,264
1873	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176
1874	8,230	229,053	125,627	.....	5,948	.....	5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1875	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	241,451
1876	5,187	96,247	58,138	.....	1,905	525	403	162,405	.....	5,531	29,395	167,110	25,808	227,844
1877	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975
1878	1,316	65,542	60,026	859	277	.....	341	128,361	.....	10,713	3,892	150,583	13,535	178,723
1879	159	53,791	33,401	.....	464	.....	11	87,826	2,405	3,648	6,318	118,573	17,797	148,741
1880	.....	30,611	16,122	1,551	296	.....	.....	48,580	4,743	3,515	371	65,945	18,380	92,954
1881	.....	34,320	30,031	924	.....	.....	10	65,285	1,313	5,570	.....	83,858	6,464	97,205
1882	107	30,227	32,433	537	.....	684	14	64,002	.....	4,076	.....	158,552	14,533	177,161
1883	2,041	54,382	66,128	735	731	.....	8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1884	1,715	40,956	53,707	.....	9,874	.....	8,170	114,422	698	599	.....	210,790	15,100	227,187
1885	124	53,235	63,229	732	882	.....	1	118,203	.....	1,594	.....	198,416	15,029	215,039
1886	7,591	53,258	94,048	.....	4,790	.....	13,201	172,888	156	5,328	1	189,964	11,364	206,813
1887	11,780	37,678	83,431	1,732	12,050	.....	10,859	157,530	.....	4,406	.....	82,780	627	87,828
1888	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,284
1889	5,017	39,229	147,045	.....	27,492	.....	17,225	236,208	.....	1,587	896	227,476	1,204	231,163
1890	9,204	31,527	180,842	6,519	27,030	.....	20,497	275,619	.....	504	208	162,231	1,620	164,563
1891	6,802	32,097	127,494	8,113	52,823	.....	26,115	253,444	.....	292	705	186,572	1,773	189,342
1892	11,018	26,950	131,222	6,433	36,935	.....	31,992	244,550	.....	576	2	183,895	.....	184,473
1893	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	.....	344	.....	206,827	.....	207,171
1894	17,795	53,846	105,329	28,095	27,621	.....	60,462	198,358	.....	297	.....	188,521	.....	188,818
1895	10,169	27,881	100,512	7,904	17,020	.....	46,316	209,802	181	246	.....	149,490	.....	149,917
1896	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	.....	146	.....	207,348	.....	207,494
1897	7,237	28,919	169,057	14,173	14,969	.....	41,887	276,242	965	15	.....	165,143	.....	166,123
1898	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814	.....	157,927
1899	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	351	1,646	553	88,931	.....	91,481
1900	7,966	18,771	60,545	2,402	39,706	2,149	14,243	145,787	.....	953	.....	46,024	.....	46,977
1901	17,165	23,557	55,531	7,119	26,344	.....	14,016	143,732	83	80	105	46,702	.....	48,970
1902	13,785	32,639	66,111	7,418	10,006	.....	12,675	142,634	.....	214	.....	12,911	.....	13,125

* Apples, meal all kinds, pease, potatoes.

C.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of forty years, ended December 31, 1910—*Concluded.*

YEARS.	VEGETABLE FOODS.							HEAVY GOODS.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.	Total.	Railway From.	Other From.	Salt.	Cod.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1903.	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459			113,072		113,535
1904.	8,556	14,269	60,964	16,621	16,497		13,079	129,986				63,882		63,882
1905.	24,054	15,483	93,622	9,197	10,892		9,682	162,930		1		73,464		73,465
1906.	15,215	13,410	135,240	9,266	11,323		10,678	195,132		169		33,523		33,692
1907.	18,898	21,892	124,474	2,812	4,741	2	22,001	194,820		30		110,347	4,050	114,420
1908.	17,694	24,651	99,830	7,148	2,070	2	21,393	172,788				158,351	1,400	159,751
1909.	15,452	17,940	100,967	4,224			22,683	161,266		5		131,131	1,531	132,667
1910.	11,859	10,717	126,938	3,840			8,571	161,925				201,893		201,893

Apples, meal all kinds, pease, potatoes.

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne, during the season of Navigation in 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909 and 1910.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	91,901		80,928		16,250		7,244		196,323	
Corn.....	28,015		18,905		138,834		18,250		204,004	
Barley.....					2,424				2,424	
Oats.....	1,557				21,646				23,203	
Pease.....										
Rye.....					923				923	
Coal.....	435		6,736				3,398		10,569	
Miscellaneous merchandise	25,203		18,651		49,522		1,567		94,943	
Shingles, woodenware, &c....	485		916				100		1,501	
Sawed lumber..... Ft. B.M.	2,077,748		772,739		14,855,338		19,949,079		37,654,904	
Square timber..... Cub. ft.	322,138		585,780		20,802		328,806		1,257,526	
Firewood..... Cords.			9						9	
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	67,694		43,157		23,066		2,130		136,047	
Corn.....	39,597		31,248		78,701		13,963		163,509	
Barley.....					2,402		1,047		3,449	
Oats.....					39,706		407		40,113	
Pease.....	115				4				119	
Rye.....	1,389				2,149				3,538	
Coal.....	723		637		433		559		2,352	
Miscellaneous merchandise.	53,649		31,536		43,344		3,564		132,093	
Shingles, woodenware, &c. ...	1,078								1,078	
Sawed lumber..... Ft. B.M.	6,847,279		5,344,258		14,984,483		18,770,405		45,946,425	
Square timber..... Cub. ft.	439,827		355,951		11,583		198,420		1,005,781	
Firewood..... Cords.	126		255						381	
Staves..... No.	1,000								1,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	197	103,802	114	59,022	163	182,497	48	22,319	522	367,640
1901	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	57,641		58,973		31,955		1,241		149,810	
Corn.....	7,350		4,689		55,717				67,756	
Barley.....					7,119				7,119	
Oats.....	944				27,197				28,141	
Pease.....										
Rye.....	2,961								2,961	
Coal.....	1,960		362		357				2,679	
Miscellaneous merchandise ..	71,300		32,312		12,874		7,469		123,953	
Shingles, woodenware, &c....	18								18	
Sawed lumber..... Ft. B.M.	6,533,423		4,060,251		11,089,806		13,092,940		34,776,420	
Square timber..... Cub. ft.	362,441		204,682		9,384		149,531		726,033	
Firewood..... Cords.	165		264						429	
Staves..... No.										

1 GEORGE V., A. 1911

D.--STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—Continued.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	196	90,791	122	73,958	191	201,339	52	22,097	561	388,185
1902.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	82,954		85,973		52,889				221,816	
Corn.....	148		1,388		66,111				67,647	
Barley.....					7,418				7,418	
Oats.....	1,200		43		9,963				11,206	
Pease.....										
Rye.....	3,808				271				4,079	
Coal.....	3,977		25,732		13,497		8,332		51,538	
Miscellaneous merchandise..	33,111		8,723		38,351		1,594		81,779	
Shingles, woodenware, &c....	47		28		4				79	
Sawed lumber.....Ft. B.M.	13,218,960		3,256,187		25,437,287		19,540,426		61,452,860	
Square timber.....Cub. ft.	370,718		557,689				115,000		1,043,407	
Firewood.....Cords.	56		40						96	
Staves.....No.			14,000						14,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	329	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	149,378		38,473		60,514		6,305		254,670	
Corn.....	21,356		4,682		174,588		10,132		210,758	
Barley.....	2,580		667		11,409				14,656	
Oats.....	306		1,335		6,112				7,753	
Pease.....	63				22				85	
Rye.....					4,904				4,904	
Coal.....	389		12,991		8,133		8,496		30,009	
Miscellaneous merchandise..	39,563		3,367		41,584		2,000		86,514	
Shingles, woodenware, &c....			54						54	
Sawed lumber.....Ft. B.M.	12,841,552		1,625,855		17,871,652		14,733,677		47,072,736	
Square timber.....Cub. ft.	572,000		660,000				84,200		1,316,200	
Firewood.....Cords.			210		9				219	
Staves.....No.			641,000						641,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	228	157,539	55	39,375	205	187,748	42	15,918	530	400,580
1904.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	116,794		33,302		14,269				164,365	
Corn.....	12,768		7,814		95,862				116,444	
Barley.....	2,619		824		23,728				27,171	
Oats.....					16,261				16,261	
Pease.....					3				3	
Rye.....	1,925		7,187		17,133		7,668		33,913	
Coal.....	34,907				1,925				36,832	
Miscellaneous merchandise..	29,567				60,548				90,115	
Shingles, woodenware, &c....										
Sawed lumber.....Ft. B.M.	15,077,382		854,811		32,751,541		9,572,655		58,259,389	
Square timber.....Cub. ft.	944,508		744,000				149,000		1,837,508	
Firewood.....Cords.					717				717	
Staves.....No.	634,000								634,000	

SESSIONAL PAPER No. 20a

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	188,706		18,575		28,757		2,512		238,550	
Corn	6,385		6,636		163,374		4,526		180,921	
Barley	6,870		1,451		47,111		.....		55,432	
Oats	8,225		2,570		21,535		3,742		36,072	
Pease .....	.....		.....		76		.....		76	
Rye .....	.....		.....		1,711		.....		1,711	
Coal	18,756		35,324		28,330		8,678		91,088	
Iron ore	14,358		8,023		.....		.....		22,381	
Merchandise	29,375		7,485		74,975		3,126		114,961	
Shingles, woodenware, &c. ....	.....		2,748,941		2,325		.....		2,325	
Sawed lumber Ft. B.M.	2,867,147		.....		38,290,831		12,479,698		54,589,200	
Square timber Cub. ft.	355,000		951,524		.....		.....		538,000	
Firewood Cords.	.....		183,000		900		.....		900	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	328	238,690	121	66,355	305	310,622	43	15,758	797	631,425
1906.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	250,493		34,355		35,578		.....		320,436	
Corn	8,177		.....		202,250		1,378		49,306	
Barley	8,546		5,046		17,854		.....		31,446	
Oats	21,900		16,083		11,323		.....		49,306	
Pease .....	.....		.....		11		.....		11	
Rye .....	.....		5		1,406		.....		1,411	
Coal	30,455		47,242		24,190		9,356		111,243	
Iron ore	5,862		.....		.....		.....		5,862	
Merchandise	35,383		7,009		110,263		50		152,705	
Shingles, woodenware, &c.	16		37		851		.....		904	
Sawed lumber Ft. B.M.	3,471,514		235,624		25,711,196		10,769,755		40,188,089	
Square timber Cub. ft.	375,000		200,000		.....		.....		575,000	
Firewood Cords.	110		18		1,093		.....		1,221	
Staves No.	.....		.....		300,000		.....		300,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	375	290,509	148	81,070	408	397,616	76	36,921	1,007	806,116
1907.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	294,298		50,808		130,818		4,429		480,303	
Corn	6,713		514		259,895		4,571		271,693	
Barley	8,726		468		4,046		.....		13,240	
Oats	49,689		16,647		7,033		.....		73,369	
Pease .....	.....		.....		25		.....		25	
Rye .....	.....		.....		2,270		.....		2,270	
Coal	31,506		57,373		50,183		14,493		143,555	
Iron ore	12,040		8,950		.....		.....		20,990	
Merchandise	21,545		9,436		5,231		6,235		42,447	
Shingles, woodenware, &c. ....	.....		.....		2,222		.....		2,222	
Sawed lumber Ft. B.M.	.....		.....		14,395,124		11,201,446		25,596,570	
Square timber Cub. ft.	558,090		323,000		.....		.....		881,090	
Firewood Cords.	.....		.....		660		.....		660	

1 GEORGE V., A. 1911

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
1908.	Tons.		Tons.		Ton.		Tons.		Tons.	
Wheat	505,151		39,001		183,101		3,498		730,751	
Corn.....	2,405		.....		124,997		.....		127,402	
Barley.. ..	19,775		1,133		10,264		.....		31,172	
Oats.....	30,091		643		2,689		.....		33,423	
Pease .....	.....		.....		40		.....		40	
Rye	742		.....		5,925		.....		6,667	
Coal.....	39,733		42,656		57,448		8,344		148,181	
Merchandise	26,815		14,783		14,410		13,686		69,694	
Firewood	Cords.		70		1,173		.....		1,243	
Sawed lumber.....	Ft. B.M.		.....		17,572,070		6,578,545		24,150,615	
Square timber... ..	Cub. ft.		313,000		.....		.....		534,300	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	555	486,406	136	71,034	323	324,576	26	17,317	1040	899,333
1909.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	415,208		34,903		133,172		.....		583,283	
Corn.. ..	6,694		.....		134,208		.....		140,902	
Barley.	17,943		360		4,848		.....		23,151	
Oats... ..	70,392		4,743		.....		.....		75,135	
Pease .....	.....		.....		63		.....		63	
Rye	33		.....		.....		.....		33	
Coal.....	160,475		53,681		21,097		630		235,883	
Merchandise.....	52,994		14,782		12,232		16,498		96,506	
Sawed lumber ..	.....		.....		31,643		10,214		41,857	
Square timber	3,450		7,840		125		1,475		12,890	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	596	599,416	142	88,963	249	285,704	14	13,563	1,001	987,646
1910.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	481,624		22,200		77,040		.....		580,864	
Corn.. ..	15,759		.....		214,221		.....		229,980	
Barley.	17,159		576		3,840		.....		21,575	
Oats.	135,743		.....		490		.....		136,233	
Pease .....	.....		.....		123		.....		123	
Rye.....	.....		.....		.....		.....		.....
Coal.....	216,779		114,671		29,646		894		361,990	
Merchandise	39,149		15,231		21,818		20,466		96,664	
Sawed lumber ..	3,630		800		16,932		.....		21,362	
Square timber...	1,930		5,000		800		.....		7,730	
Shingles.. ..	.....		.....		525		.....		525	
Unenumerated.	74,434		1,772		24,031		.....		100,237	
Total	986,207		160,250		389,466		21,360		1,557,283	

SESSIONAL PAPER No. 20a

WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

WELLAND CANAL—WEST BOUND FREIGHT.

THE total quantity of Through Freight passed Up the Welland Canal in Canadian and United States Vessels during the Season of Navigation in 1910 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels.	352,468	
" sail.	4,551	
Total quantity in Canadian vessels		357,019
In United States steam vessels.	356,183	
" sail vessels.	11,034	
Total in United States vessels.		367,217
Grand total freight passed Up the Welland Canal in Canadian and United States vessels.		724,236

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1910.

Summary.	Tons.	Tons.
In Canadian steam vessels up.	352,468	
" " down.	986,207	
Total in Canadian steam vessels		1,338,675
In Canadian sail vessels up.	4,551	
" " down.	160,250	
Total in Canadian sail vessels		164,801
Total quantity in Canadian vessels.		1,503,476
In United States steam vessels up.	356,183	
" " down.	389,466	
Total in United States steam vessels.		745,649
In United States sail vessels up.	11,034	
" " down.	21,360	
Total in United States sail vessels.		32,394
Total quantity in United States vessels.		778,043
Total in Canadian and United States vessels.		2,281,519
	Down on East Bound.	Up or West Bound.
In Canadian vessels.	1,146,457	357,019
In United States vessels.	410,826	367,217
Total.	1,557,283	724,236

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence canals, to Montreal, during the Seasons of Navigation 1898 to 1910.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class A.</i>													
Cement and water lime.							35					5,652	484
Clay, lime and sand.	52	15	15					22					
Iron, railway.					50		8,170	10					
" pig.			508										
" all other	6,217	5,003	4,292	1,178	5,785	2,542	1,651	384	209	124	553	12,089	7,154
Steel.	1,351	3,000	5,420				16	48					
Stone, for cutting.													
Apples.							1			9,936			
Barley.	3,960	596	1,288			2,206	9,697	43,607	21,196	105,984	24,318	19,143	20,000
Corn.	310,498	150,999	109,359	14,319	1,719	123,864	55,021	84,204	55,559		10,454	17,137	77,612
Flaxseed.	5,687			4,965		3,643	212	15,694	80,570	49,159	27,500	19,634	6,607
Flour.	653	4,229	1,505	1,400	6,755	16,151	24,662	14,571	9,174	3,730	5,028	21,905	27,081
Meal, all kinds.				35		348	57	270	60		156		10,323
Oats.	3,975	10,250	8,925	1,584	1,442	2,438		21,404	37,164	66,941	28,081	65,624	129,900
Oil cake.				1,083		462	7,846	9,229					
Pease.	260		115			63						30	
Rye.	15,488	923	3,078	2,961	4,079	4,260		1,711	1,405	2,266	6,662	120	
Salt.	144	183		50		132	615	168	75	143	419		
Seed, all kinds.		200								29			
Hay, pressed.		96		246									
Tobacco, raw.				23									
Wheat.	184,154	169,978	121,896	132,702	200,975	226,746	133,528	190,505	289,611	450,446	686,626	550,775	562,149
All other agricultural products, vegetables.	56	32											
Hides, skins, horns and hoofs.							10					5,876	
Horses.	4	1							2				
Lard and lard oil.				1,155									
Meats, all kinds.				114				2,847	4,810				
Pork.				34							524		
Tallow.						3		53					
All other agricultural products, animal.							1					366	
Total, class A.	532,499	345,565	256,491	161,849	220,805	382,858	241,522	384,727	499,895	688,749	790,321	718,951	841,310

6.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1909 and 1910.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>												
Bricks.	70	24	49	196	22	80	115	132		556		
Brimstone				5	20	23	12					
Cement and water lime.	996	997	1,931	2,916	178	3,924	39	181	88	13	400	17,565
Clay, lime and sand	144	8	4	2	1	181				100		
Cotton, raw						23						
Fish.	9	10	8	8		8	4			39		
Gypsum.		4										
Iron, railway.			74	748	11,735	39,641	283	126	7,289	4,119		
" pig.			3		558	273		312	680	7,655	7,231	2,060
" all other.		1,318	1,428	4,950	2,904	5,845	3,782	3,633	8,235	6,987		540
Salt.	699		48	75	4	87	99	150	17			
Steel	35			3	11	332	58	192	111	2,561	35,153	
Stone for cutting.	19	18		16			41					
Flour								18				
Hay.										30	255	1,113
Meals.						17	25					
Oats												
Potatoes.												
Seeds, all kinds	56	121	218	302	58	325	161	35	17			
Tobacco, raw					1	2						
Agricultural products, not enumerated, vegetable.				1	1			127				
Hides and skins					16	6						
Horses.	1											
Lard and lard oil.	2				11			28	20	1		
Meats other than pork						1	25			15		
Pork.			1									
Wool												
All other articles not enumerated.												
Total, class 3.	2,031	2,500	3,764	9,222	15,520	50,768	4,647	4,934	16,457	22,076	43,039	21,278

H.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Seasons of Navigation from 1898 to 1910 inclusive.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 2.													
Bricks.....													
Cement and water line.....	300		18										2,000
Fish.....										20			
Iron, railway.....	770												
" all other.....	324	1,008	714		30			1	27	30			
Salt.....		549		105									
Steel.....	2,951	13,522	3,110						2	509	9,086		
Stone for cutting.....													
Apples.....													
Barley.....	6,909	2,424	2,402	7,119	7,418	11,433	16,621	9,197	9,206	2,812	7,148	4,224	3,840
Corn.....	150,667	81,777	60,545	55,531	66,111	108,917	60,964	93,622	135,240	124,474	99,830	100,067	126,938
Flour.....	4,212	6,118	7,966	17,168	13,785	6,082	8,556	24,054	15,215	18,898	17,694		11,859
Hay, pressed.....								200					
Meal, all kinds.....	22,626	18,198	14,244	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,353		8,621
Marble.....								87					
Nails.....								1					
Oil cake.....			2,705	1,302	110	740	16,497	228		114			
Oats.....	12,729	19,526	39,706	26,344	10,006	6,112	3	10,892	11,323	4,741	2,070		
Pease.....	45		4			22		76	11	25	40	63	123
Potatoes.....													
Rye.....	1,197	923	2,149			4,174				2	2		
Flax seed.....		200				1,594			756			15,452	
Seeds, all kinds.....	44	11			10	27		43	3	17			
Tobacco.....				23									
Wheat.....	11,268	12,926	18,771	23,557	32,639	15,436	14,260	15,483	13,410	21,892	24,651	17,940	10,717
Agricultural products, vegetable.....			6	10		1			1	7		22,620	
Hides and skins, &c.....											21	315	233
Horses.....	2		4			2							
Lard and lard oil, &c.....	3,671	864	1,588	1,680	2,413				22	86			
Meats, other than pork.....													
Pork.....	1,271	343	117	970	632	152	379	273	268	420	190		
Sheep.....													
Tallow.....	359	201	631	119									
Wool.....	89	130		3	752	482	134	21	89	30		157	233
Total, class 3.....	219,434	158,720	154,680	147,947	146,581	168,720	130,499	163,784	196,301	196,062	182,085	161,738	164,564

Class 4.

[illegible]

Class 5.

Class 5.		5	282	4	717	3	2	1		
Empty barrels.	57,695	55,128	38,085	72,806	48,337	2,700	3,609	1,980	3,509	1,531
Firewood, in vessels.						717		14,314	21,571	11,738
Lumber, sawn, in vessels.	52,844					30,194	27,701		24,327	
Masts and spars, in vessels.										
Hop poles.						154				
Railway ties, in vessels.						652		2,151	478	
Shingles.							53	70		
Split posts.						12	1,500			25
Staves, salt barrels.										
Timber, square, in vessels.									125	
Woodenware, &c.									2,932	1,583
Total, class 5.	52,844	55,133	38,367	72,810	48,337	31,717	32,865	18,516	25,558	14,877

Spinal class.

[illegible]

1 GEORGE V., A. 1911

L STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1910.

Ports.	Wheat.	Oats.	Barley.	Corn.	Other Grain.	Total.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.
Kingston	9,481,700	3,848,235	438,250	375,428	1,360	14,144,973	371,699
Prescott...	85,527	32,016	.....	62,711	.....	180,254	5,010
Ogdensburg ..	.....	.....	.....	15,000	.....	15,000	420
Total Bushels....	9,567,227	3,880,251	438,250	453,139	1,360	14,340,227
Total Tons.	287,017	66,558	10,768	12,738	48	377,129

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M—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1910 inclusive, as follows :—

Years.	From Canadian Ports to Canadian Ports.	From Canadian Ports to Canadian Ports.	From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1885			193,442	4,974	10,321	31,350	240,087
1886			184,564	5,400	22,187	49,724	261,875
1887			81,617	1,163	26,775	25,968	135,523
1888			172,381	878	17,365	27,183	217,807
1889			226,352	1,124	12,036	25,931	265,443
1890	80		116,616	615	17,280	22,781	202,372
1891			185,190	1,382	17,374	20,698	224,644
1892			183,244	651	12,391	15,330	211,616
1893			204,704	2,123	8,325	17,944	233,096
1894			187,794	727	1,269	13,947	203,737
1895	4		148,887	603	1,565	7,807	158,866
1896	20	210	206,093	1,255	4,127	11,740	223,445
1897		4	165,143		1,277	9,799	176,223
1898			156,055	759	986	4,536	162,336
1899			86,638	2,293	525	8,276	97,732
1900	8		45,032	992		1,360	47,392
1901			46,345	357	456	2,322	49,480
1902			12,410	501	65	51,037	61,013
1903	3		113,076		4,796	30,009	147,884
1904	2,919		62,782	1,100	3,711	32,813	103,325
1905			70,118	3,346	11,436	37,742	172,642
1906	60		29,123	4,400	7,161	106,843	147,587
1907	2,857		110,347		10,453	143,555	267,212
1908	4,401		158,351		5,988	148,181	316,921
1909			130,731	400	11,067	235,483	377,681
1910	2,045		197,482	4,411	15,974	357,579	577,491

1 GEORGE V., A. 1911

N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence Canals during the seasons of 1885 to 1910, inclusive.

Years.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down
	Tons.	Tons.	Tons.
1885.	5,035	122,829	127,864
1886.	3,301	118,802	122,103
1887.	7,579	121,618	129,197
1888.	8,341	123,050	131,391
1889.	5,360	124,290	129,650
1890.	6,538	135,168	141,706
1891.	7,951	141,701	149,652
1892.	7,543	157,134	164,677
1893.	2,285	147,139	149,424
1894.	16,213	169,552	185,765
1895.		165,151	165,151
1896.	689	161,551	162,240
1897.	40	164,963	165,003
1898.	400	175,609	176,009
1899.	448	201,546	201,994
1900.	10	280,169	280,179
1901.	2,765	298,245	301,010
1902.	9,231	95,702	104,933
1903.	30	290,548	290,578
1904.	9,670	320,973	330,643
1905.	8,518	345,589	354,107
1906.	6,989	313,080	320,069
1907.	1,281	406,978	408,259
1908.	23,939	448,140	472,079
1909.	13,543	469,695	483,238
1910.	7,351	746,926	754,277

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O.—STATEMENT showing the quantity of Through Freight passed down the Welland Canal, &c.

RECAPITULATION.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1899.	Tons.	Tons.	Tons.
Barley	568	.....	1,828
Corn	150,999	16,594	43,854
Oats	10,250	1	13,139
Pease .....	.....	.....	.....
Rye	923	.....	.....
Wheat	169,978	24,602	9,190
Total grain	‡ 332,736	40,197	68,011
Other articles	21,739	68,671	104,727
Total	354,485	108,958	172,732
1900.			
Barley	1,288	563	1,598
Corn	109,358	9,844	44,406
Oats	8,925	348	30,840
Pease	115	.....	4
Rye	3,078	160	300
Wheat	121,896	6,610	7,541
Total grain	**244,661	17,525	84,589
Other articles	43,670	95,680	93,287
Total	288,231	113,205	177,876
1901.			
Barley .....	.....	.....	.....
Corn	14,319	4,828	49,609
Oats	1,584	853	25,704
Pease .....	.....	.....	.....
Rye	2,961	.....	.....
Wheat	132,702	8,051	9,057
Total grain	†151,566	13,732	83,370
Other articles	32,854	128,614	91,799
Total	184,420	142,346	175,169
1902.			
Barley .....	.....	.....	7,418
Corn	1,719	10,335	55,583
Oats	1,412	.....	9,764
Pease .....	.....	.....	.....
Rye	4,079	.....	.....
Wheat	200,075	12,452	8,389
Total grain	‡208,215	22,787	81,165
Other articles	42,260	32,946	179,914
Total	250,475	55,733	261,078

1 GEORGE V., A. 1911

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

RECAPITULATION—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1903.	Tons.	Tons.	Tons.
Barley.....	2,206	1,017	11,433
Corn.....	116,223	13,846	80,689
Oats.....	2,438	.....	5,315
Pease.....	63	.....	22
Rye.....	4,200	.....	644
Wheat.....	226,746	14,199	13,725
Total grain.....	\$351,936	29,062	111,828
Other articles.....	38,850	82,298	101,621
Total.....	390,786	111,360	213,449
1904.			
Barley.....	9,697	853	16,621
Corn.....	55,021	3,950	57,473
Oats.....	.....	.....	16,497
Pease.....	.....	.....	3
Rye.....	.....	.....	.....
Wheat.....	*133,528	18,908	11,929
Total grain.....	198,246	23,711	102,523
Other articles.....	77,031	80,092	138,475
Total.....	375,277	103,803	240,998
1905.			
Barley.....	43,607	2,028	9,197
Corn.....	84,204	3,095	93,622
Oats.....	21,404	3,776	10,892
Pease.....	.....	.....	76
Rye.....	1,711	.....	.....
Wheat.....	190,505	32,562	15,483
Total grain.....	**341,431	42,061	129,270
Other articles.....	107,273	123,225	104,747
Total.....	448,704	165,286	234,017
1906.			
Barley.....	21,196	984	9,266
Corn.....	55,559	15,688	140,558
Oats.....	37,164	819	11,323
Pease.....	.....	11	.....
Rye.....	1,405	6	.....
Wheat.....	***289,611	15,843	14,972
Total grain.....	404,935	33,351	176,119
Other articles.....	118,224	176,277	59,884
Total.....	523,159	209,628	236,003

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Concluded.*

RECAPITULATION—*Concluded.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1907.	Tons.	Tons.	Tons.
Barley	9,936	492	2,812
Corn	106,299	31,901	133,493
Oats	67,063	1,565	4,741
Pease			25
Rye	2,266	2	2
Wheat	*450,009	8,072	22,222
Total grain	635,573	42,032	163,295
Other articles	153,594	126,423	93,127
Total	789,167	168,455	256,422
1908.			
Barley	24,318	3,546	3,308
Corn	10,454	11,489	105,459
Oats	28,081	3,272	2,070
Pease			40
Rye	6,662	3	2
Wheat	1686,626	19,832	24,293
Total grain	756,141	38,142	135,172
Other articles	108,785	162,378	91,875
Total	864,926	200,520	227,047
1909.			
Barley	19,143		4,008
Corn	17,137	22,798	100,967
Oats	65,624	2,872	6,639
Pease	30		33
Rye	33		
Wheat	550,775	14,568	17,940
Total grain	632,742	40,238	129,587
Other articles	272,263	113,970	126,223
Total	925,005	154,208	255,810
1910.			
Barley	20,000		1,575
Corn	77,612	49,326	103,042
Oats	129,900	6,333	
Pease			123
Rye			
Wheat	562,149	7,998	10,717
Total grain	789,661	63,657	115,457
Other articles	380,500	152,325	55,683
Total	1,170,161	215,982	171,140

TABLE 1. Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation, 1909 and 1910.

Canals.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.	
1909.														
Sault Ste. Marie.	641,601	1,567,940	46,041	512,293	1,736,801	22,188,388	1,000,300	167,881	3,424,743	24,436,502	27,861,245	3,366,495	24,494,750	
Welland.	217,737	618,718	164,304	16,469	248,581	196,838	11,467	551,837	642,089	1,383,862	2,025,951	1,050,241	975,710	
St. Lawrence.	533,668	932,104	242,954	36,547	140		3,759	661,557	780,421	1,630,208	2,410,629	1,710,797	699,832	
Chambly.	5,480	11,475	606,466					128,696	611,946	140,171	752,117	623,421	128,696	
St. Peter's.	27,169	52,052					629		27,798	52,052	79,850	79,150	700	
Murray.	72,034	7,244	406				672	21,935	73,112	29,179	102,291	79,254	23,037	
Ottawa.	49,131	240,150	150	42,833			5,175		54,456	282,483	336,939	331,104	5,835	
Rideau.	44,120	33,033	394	252			1,827	12,148	46,341	45,433	91,774	77,643	14,131	
Trent.	17,819	42,133							17,819	42,133	59,952	59,952		
Grand total..	1,608,659	3,504,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,678,725	28,042,023	33,720,748	7,378,057	26,342,691	
1910.														
Sault Ste. Marie.	779,961	1,567,285	28,648	565,335	3,035,290	29,332,862	969,248	117,058	4,813,147	31,582,540	36,395,687	3,378,268	33,017,419	
Welland.	265,790	742,908	154,617	6,983	288,198	197,301	16,229	654,264	724,834	1,601,456	2,326,290	1,196,946	1,129,344	
St. Lawrence.	556,833	1,123,520	286,075	22,235	334		777	770,978	844,019	1,916,733	2,760,752	1,973,441	787,311	
Chambly.	383,148	12,307	130,245					143,599	513,393	155,906	669,299	525,700	143,599	
St. Peter's.	33,482	52,240					229		33,711	52,240	85,951	85,722	229	
Murray.	161,737	8,546	555					7,103	162,292	15,649	177,941	170,680	7,261	
Ottawa.	49,923	266,519		61,013			7,806		57,729	327,532	385,261	377,268	7,993	
Rideau.	58,049	57,218	1	5,870			1,460	12,280	59,513	75,368	134,881	121,043	13,838	
Trent.	15,665	30,598							15,665	30,598	46,263	46,263		
St. Andrews.	8,152	131							8,152	131	8,283	8,283		
Grand total..	2,312,740	3,861,272	600,144	661,436	3,323,822	29,530,163	995,749	1,705,282	7,232,455	35,758,153	42,990,608	7,883,614	35,106,991	

TABLE 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation in 1910.

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Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
CANADIAN VESSELS.												
Steam and Sail.												
Sault Ste. Marie.....	2,744	1,192,124	1,209,938	100,620	120,788	76,096	89,461	270,561	113,906	1,639,401	1,534,093	3,173,494
Welland.....	1,852	528,479	476,520	175,546	.....	18,839	157	15,633	246,325	738,497	723,002	1,461,499
St. Lawrence.....	8,834	1,452,888	1,195,749	10,104	260	216	.....	1,361	249,817	1,464,569	1,445,826	2,910,395
Chambly.....	619	39,336	39,210	12,081	.....	.....	.....	.....	7,170	51,417	46,380	97,797
Ottawa.....	2,189	203,069	206,805	.....	1,033	.....	.....	.....	.....	203,069	207,838	410,907
Rideau.....	2,749	83,284	81,867	4,351	605	.....	.....	.....	6,340	87,635	88,812	176,447
St. Peter's.....	1,466	53,893	52,349	.....	.....	.....	.....	.....	.....	53,893	52,349	106,242
Trent Valley.....	3,442	85,400	86,685	.....	.....	.....	.....	.....	.....	85,400	86,685	172,085
Murray.....	1,240	230,714	132,879	10,954	2	.....	.....	.....	3,488	241,668	136,369	378,037
St. Andrew's.....	202	22,426	22,461	.....	.....	.....	.....	.....	.....	22,426	22,461	44,887
Total Canadian.....	25,337	3,891,613	3,504,463	313,656	122,688	95,151	89,618	287,555	627,046	4,587,975	4,343,815	8,931,790
UNITED STATES VESSELS.												
Sault Ste. Marie.	5,228	74,922	17,785	26,865	270,188	5,220,109	14,268,834	266,890	42,111	5,588,786	14,598,916	20,187,704
Welland.....	1,392	41,235	27,148	165,640	8,041	12,059	977	12,317	214,727	231,251	250,893	482,144
St. Lawrence.....	692	89	1,319	57,999	2,430	277,249	218,745	927	128,260	336,264	350,754	687,018
Chambly.....	3,000	.....	1,206	177,848	.....	.....	.....	.....	190,395	177,848	191,601	369,449
Ottawa.....	412	771	1,120	.....	22,203	.....	.....	17,568	301	18,339	23,624	41,963
Rideau.....	66	1,715	1,031	.....	2,313	.....	.....	1,736	.....	3,451	3,344	6,795
St. Peter's.....	4	134	522	.....	155	.....	.....	.....	.....	134	677	811
Trent Valley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murray.....	68	356	367	350	.....	.....	9	.....	307	.....	683	1,413
St. Andrew's.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total United States....	11,462	119,222	50,498	428,702	305,330	5,509,417	14,488,565	299,462	576,101	6,356,803	15,420,494	21,777,297
Grand total Canadian and U.S.:	36,799	4,010,835	3,554,961	742,358	428,018	5,604,568	14,578,183	587,017	1,203,147	10,944,778	19,764,309	30,709,087

1 GEORGE V., A. 1911

TABLE 3.- STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
SAULT STE. MARIE CANAL.					
Canadian vessels steam.....	2,652	1,175,362	1,195,110	96,171	120,788
" " sail.....	92	16,762	14,828	4,449	
Total Canadian.....	2,744	1,192,124	1,209,938	100,620	120,788
United States vessels, steam.....	5,103	67,950	17,507	26,815	264,640
" " sail.....	125	6,972	278	20	5,548
Total United States.....	5,228	74,922	17,785	26,865	270,188
Grand total of Sault Ste. Marie Canal.....	7,972	1,267,046	1,227,723	127,485	390,976
WELLAND CANAL.					
Canadian vessels, steam.....	1,316	482,482	433,387	112,091	
" " sail.....	536	45,997	43,133	63,455	
Total Canadian.....	1,852	528,479	476,520	175,546	
United States vessels, steam.....	646	89	1,319	39,523	2,430
" " sail.....	46			18,476	
Total United States.....	692	89	1,319	57,999	2,430
Grand total, Welland Canal.....	2,544	528,568	477,839	233,545	2,430
ST. LAWRENCE CANALS.					
Canadian vessels, steam.....	4,251	831,546	632,368	5,562	98
" " sail.....	4,583	621,342	563,381	4,742	162
Total Canadian.....	8,834	1,452,888	1,195,749	10,104	260
United States vessels, steam.....	772	18,898	8,018	135,316	253
" " sail.....	620	22,337	19,130	30,324	7,788
Total United States.....	1,392	41,235	27,148	165,640	8,041
Grand total, St. Lawrence Canals.....	10,226	1,494,123	1,222,897	175,744	8,301
CHAMBLY CANAL.					
Canadian vessels, steam.....	299	34,053	34,105		
" " sail.....	320	5,283	5,105	12,081	
Total Canadian.....	619	39,336	39,210	12,081	
United States vessels, steam.....					
" " sail.....	3,600		1,206	177,848	
Total United States.....	3,600		1,206	177,848	
Grand total, Chambly Canal.....	4,219	39,336	40,416	190,929	
OTTAWA CANALS.					
Canadian vessels, steam.....	972	97,812	102,043		569
" " sail.....	1,217	105,257	104,762		464
Total Canadian.....	2,189	203,069	206,805		1,033

passed through the several Canals during the season of Navigation in 1910.

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
71,207 4,889	85,961 3,500	267,299 3,262	106,388 7,518	1,610,039 29,362	1,508,247 25,846	3,118,286 55,208
76,096	89,461	270,561	113,906	1,639,401	1,534,093	3,173,494
5,135,154 84,955	14,162,381 106,453	262,794 4,096	42,111	5,492,743 96,043	14,486,639 112,279	14,979,382 208,322
5,220,109	14,268,834	266,890	42,111	5,588,786	14,598,918	20,187,704
5,296,205	14,358,295	537,451	156,017	7,228,187	16,133,011	23,361,198
18,471 368	157	13,031 2,602	179,130 67,195	626,075 112,422	612,674 110,328	1,238,749 222,750
18,839	157	15,633	246,325	738,497	723,002	1,461,499
276,680 569	218,745	927	111,629 16,631	317,219 19,045	334,123 16,631	651,342 35,676
277,249	218,745	927	128,260	336,264	350,754	687,018
296,088	218,902	16,560	374,585	1,074,761	1,073,756	2,148,517
216		145 1,216	192,780 57,037	837,269 627,300	825,246 620,580	1,662,515 1,247,880
216		1,361	249,817	1,464,569	1,445,826	2,910,395
11,263 796	977	6,554 5,763	177,304 37,423	172,031 59,220	186,552 64,341	358,583 123,561
12,059	977	12,317	214,727	231,251	250,893	482,144
12,275	977	13,678	464,544	1,695,820	1,696,719	3,392,539
				34,053 17,364	34,105 12,275	68,158 29,639
			7,170	51,417	46,380	97,797
			190,395	177,848	191,601	369,449
			190,395	177,848	191,601	369,449
			197,565	229,265	237,981	467,246
				97,812 105,257	102,612 105,226	200,424 210,483
				203,069	207,838	410,907

1 GEORGE V., A. 1911

Table 3.—STATEMENT Showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up	Down.	Up.	Down.
CHAMBLY CANAL.					
United States vessels, steam.....	6	180	240		280
" " sail	406	591	880		21,923
Total United States.....	412	771	1,120		22,203
Grand total, Ottawa Canals.....	2,601	203,840	207,925		23,236
RIDEAU CANAL.					
Canadian vessels, steam.....	2,105	57,602	56,987	4,351	
" " sail	644	25,682	24,880		605
Total Canadian.....	2,749	83,284	81,867	4,351	605
United States vessels, steam.....	2	9	9		
" " sail	64	1,706	1,022		2,313
Total United States.....	66	1,715	1,031		2,313
Grand total, Rideau Canal... ..	2,815	84,999	82,898	4,351	2,918
ST. PETER'S CANAL.					
Canadian vessels, steam.....	310	17,414	15,570		
" " sail	1,156	36,479	36,779		
Total Canadian.....	1,466	53,893	52,349		
United States vessels, steam.....	2	134	37		
" " sail	2		485		155
Total United States.....	4	134	522		155
Grand total, St. Peter's Canal....	1,470	54,027	52,871		155
TRENT VALLEY CANALS.					
Canadian vessels, steam	2,794	68,746	68,336		
" " sail	648	16,654	18,349		
Total Canadian... ..	3,442	85,400	86,685		
United States vessels, steam.....					
" " sail					
Total United States					
Grand total, Trent Valley Canals	3,442	85,400	86,685		
MURRAY CANAL.					
Canadian vessels, steam.....	845	194,763	101,957	3,085	
" " sail.....	395	35,951	30,922	7,869	2
Total Canadian	1,240	230,714	132,879	10,954	2
United States vessels, steam.....	47	87	329	243	
" " sail.....	21	269	38	107	
Total United States.... ..	68	356	367	350	
Grand total, Murray Canal.....	1,308	231,070	133,246	11,304	2

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passed through the several Canals during the Season of Navigation in 1910--*Continued.*

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons
Up.	Down.	Up.	Down.	Up.	Down.	
				180	520	700
		17,568	301	18,159	23,104	41,263
		17,568	301	18,339	23,624	41,963
		17,568	301	221,408	231,462	452,820
			6,122	61,953	63,109	125,062
			218	25,682	25,703	51,385
			6,340	87,635	88,812	176,447
				9	9	18
		1,736		3,442	3,335	6,777
		1,736		3,451	3,344	6,795
		1,736	6,340	91,086	92,156	183,242
				17,414	15,570	32,984
				36,479	36,779	73,258
				53,893	52,349	106,242
				134	37	171
					640	640
				134	677	811
				54,027	53,026	107,053
				68,746	68,336	137,082
				16,654	18,349	35,003
				85,400	86,685	172,085
				85,400	86,685	172,085
			1,083	197,848	103,040	300,888
			2,405	43,820	33,329	77,149
			3,488	241,668	136,369	378,037
	9	24	254	354	592	946
			53	376	91	467
	9	24	307	730	683	1,413
	9	24	3,795	242,398	137,052	379,450

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TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
ST. ANDREW'S CANAL.					
Canadian vessels, steam	180	21,489	21,425	.....	.....
" sail	22	937	1,036	.....	.....
Total Canadian.....	202	22,426	22,461	.....	.....
United States vessels, steam.....
" sail
Total United States.....
Grand total, St. Andrew's Canal.	202	22,426	22,461

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passed through the several Canals during the season of Navigation in 1910 *Concluded.*

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up	Down.	
				21,489	21,425	42,914
				937	1,036	1,973
				22,426	22,461	44,887
				22,426	22,461	44,887

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TABLE 4.—COMPARATIVE STATEMENT of all the Canals for the Years ended December 31, 1909 and 1910.

Articles.	1909.	1910.	Increase.	Decrease.
<i>Class No. 1.</i>	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam.....	6,150,224	6,927,062	776,838	.....
" sail.....	1,661,354	2,004,728	343,374	.....
United States vessels, steam.....	15,726,035	20,991,142	5,265,107	.....
" sail....	733,287	786,155	52,868	.....
Total, class No. 1	24,270,900	30,709,087	6,438,187	.....
<i>Class No. 2.</i>	No.	No.	No.	No.
Passengers.	272,222	320,574	48,352	.....
<i>Class No. 3.</i>	Tons.	Tons.	Tons.	Tons.
Barley	176,577	161,016	.....	15,561
Buckwheat.....	6,789	1,048	.....	5,741
Corn.....	180,203	336,592	156,389	.....
Oats.....	432,769	565,430	132,661	.....
Rye	7,688	4,272	.....	3,416
Flax	206,750	85,654	.....	121,096
Peas	326	340	14	.....
Wheat	3,397,567	3,222,862	.....	174,705
Flour	324,044	362,187	39,143	.....
Hay	36,503	42,846	6,343	.....
Other mill products	57,288	55,003	.....	2,285
Fruit and vegetables	15,036	16,026	990	.....
Potatoes	9,457	7,082	.....	2,375
Live stock.....	1,635	2,250	615	.....
Poultry, game, fish.....	3,064	2,815	.....	249
Dressed meats.....	573	148	.....	425
Other packing house products.....	3,201	1,205	.....	1,996
Hides and leather	594	1,261	667	.....
Wool	287	675	388	.....
All other animal products	14,947	12,169	.....	2,778
Total, class No. 3.....	4,875,298	4,881,881	337,210	330,627
<i>Class No. 4.</i>				
Agricultural implements.....	18,836	28,358	9,522	.....
Cement, bricks, lime.....	489,745	728,453	238,708	.....
Household goods and furniture.....	2,517	3,797	1,280	.....
Iron, pig and bloom	98,667	115,997	17,330	.....
" and steel, all other	309,188	252,061	.....	57,127
Petroleum and other oils.....	99,980	106,191	6,211	.....
Sugar and salt	104,474	101,003	.....	3,471
Wines, liquors and beers	18,314	28,316	10,002	.....
Merchandise not enumerated	723,680	861,361	137,681
Total, class No. 4.....	1,865,401	2,225,537	420,734	60,598

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TABLE 4.—COMPARATIVE STATEMENT of all the Canals for the Years ended December 31, 1909 and 1910—*Concluded.*

Articles.	1909.	1910.	Increase.	Decrease.
<i>Class No. 5.</i>	Tons.	Tons.	Tons.	Tons.
Pulpwood	883,937	777,427	.....	106,510
Sawed lumber	668,780	735,589	66,809	.....
Squared timber	31,772	58,633	26,861	.....
Shingles	8,992	11,475	2,483	.....
Other woods	95,665	98,294	2,629	.....
Total, class No. 5	1,689,146	1,681,418	98,782	106,510
<i>Class No. 6.</i>				
Hard coal	933,234	1,208,722	275,488	.....
Soft "	3,090,799	4,429,222	1,338,423	.....
Coke	1,456	792	.....	664
Copper ore	8,329	37,986	29,657	.....
Iron "	21,204,848	28,494,716	7,289,868	.....
Other "	52,237	30,334	.....	21,903
Total, class No. 6	25,290,903	34,201,772	8,933,436	22,567
Grand total	33,720,748	42,990,608	9,790,162	520,302

Net increase, 9,269,860.

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Class No. 4.

Agricultural implements.....	13,624	13,624	240	118	196	462	12	74	2
Cement, bricks, lime.....	149,561	110,987	191,531	5,744	50,268	60,392	2,639	7,396	149,860
Household goods and furniture.....	1,184	146	1,700	62	227	260	49	46	121
Iron—Pig and bloom.....	72,929	20,374	21,101	114	333	343	64	72	667
and steel, all other.....	145,788	37,207	63,963	843	1,108	1,212	505	23	1,412
Petroleum and other oils.....	8,176	57,807	37,287	152	956	912	505	24	372
Sugar and salt.....	30,332	43,668	16,936	669	4,332	3,636	1,142	11	277
Wines, liquors and beers.....	4,898	10,068	10,902	73	966	697	140	23	543
Merchandise not enumerated.....	436,034	222,452	153,341	14,059	13,908	8,385	2,833	1,003	9,252
Total, Class Four.....	862,526	516,333	497,007	21,834	72,294	76,299	7,889	8,672	162,506

Class No. 5.

Pulpwood.....	10,350	123,143	264,062	364,717	.....	2,049	.....	5,963	915	6,228
Sawed lumber.....	64,163	21,372	259,667	130,305	218,230	29,472	8,168	1,782	2,113	317
Squared timber.....	13,285	8,097	28,776	19	6,605	788	431	543	89	.....
Shingles.....	9,141	525	545	14	65	110	886	189	.....	.....
Other woods.....	3,674	1,600	11,278	1,064	43,299	7,697	639	27,372	354	1,407
Total, Class Five.....	100,613	154,737	564,328	496,119	268,199	40,026	10,124	35,849	3,471	7,952

Class No. 6.

Hard coal.....	601,208	215,501	278,184	99,128	4,500	9,662	447	92	.....	.....
Soft ".....	3,508,357	361,990	476,093	357	29,287	3,642	41,913	183	7,400	.....
Coke.....	.....	192	300	.....	300	.....	.....	.....	.....	.....
Copper ore.....	35,806	2,180	.....	.....	.....	.....	.....	.....	.....	.....
Iron ore.....	28,440,952	29,779	164	23,547	4	.....	240	30	.....	.....
Other ore.....	11,100	2,352	4,311	4,243	1,843	243	5,868	374	.....	.....
Total, Class Six.....	32,597,423	611,994	759,032	127,275	35,934	13,517	48,468	679	7,400	.....
Grand total.....	36,395,687	2,326,290	2,760,752	669,299	385,261	134,881	85,951	46,263	177,941	8,283

TABLE 6—SUMMARY Statement of Traffic on the undermentioned Canals during the Season of Navigation, ended December 31, 1910, showing the total quantity of each description of property passed through.

	Sault Ste. Marie.	Welland.	St. Lawrence	Chambly.	Ottawa.	Rideau.	St. Peter's.	Murray.	Trent Valley.	St. Andrew's
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Vessels of all kinds.	23,361,198	2,148,517	3,392,539	467,246	452,870	183,242	107,053	379,450	172,085	44,887
Passengers	No. 33,291	No. 1,655	No. 120,732	No. 2,399	No. 26,458	No. 26,040	No. 633	No. 33,782	No. 69,186	No. 6,398
Forest Produce of Wood.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Pulwood.	10,350	123,143	264,062	364,717		2,049		915	5,963	6,228
Sawed lumber.	64,163	21,372	259,667	130,305	218,230	29,472	8,168	2,113	1,782	317
Squared timber.	13,286	8,097	28,776	19	6,605	788	431	89	543	
Shingles.	9,141	525	545	14	65	110	886		189	
Other woods.	3,674	1,600	11,278	1,064	43,299	7,607	639		27,372	1,407
Totals.	100,613	154,737	564,328	496,119	268,199	40,026	10,124	3,471	35,849	7,952
Animals and Produce of Animals.										
Live stock.	47		1,003	233	649	13	35		270	
Poultry, game and fish.		202	168	12	88	7	2,328	10		
Dressed meats			47		2	50	19	29	1	
Other packing house products.	12		365	98	267	205	206	52		
Hides and leather.	903	248	77		11	4	6		12	
Wool.	394	238	29	1		1	2	5		
All other animal products.	12		7,825	60		1,844	3	53	147	
Total.	1,368	688	9,514	404	3,242	2,124	2,599	149	435	
Agricultural Products.										
Barley.	117,687	21,575	21,654	23	19	45	7		6	
Buckwheat.			1,038	2	3		5			
Corn.	4,879	229,980	101,258	99	55	316	3		2	
Oats.	282,369	134,233	140,709	522	583	426	4,569		18	1
Rye.	3,780		461		4	2	19		6	
Flax.	69,792	6,942	8,919			1				

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Peas.....	123	146	22	59	1	37
Wheat.....	587,493	582,426	104	59	642	229
Flour.....	41,152	34,650	1,117	773	348	20	86
Hay.....	841	11,743	18,801	2,214	379	1,935	.....	50	125
Other mill products.....	18,149	20,267	247	916	307	2,996	.....	62	28
Fruits and vegetables.....	50	6,895	2,697	449	400	627	148	.....	.....
Potatoes.....	.....	685	22	487	18	974	1,247	132	.....
	.....	.....	.....	.....	.....	5,736	.....	.....	.....
Total.....	1,042,538	930,851	23,667	5,592	2,885	16,871	4,415	628	154
<i>Manufactures.</i>									
Agricultural implements.....	13,624	246	118	196	462	12	2	74	.....
Cement, bricks and lime.....	149,561	191,531	5,744	50,268	60,392	2,639	149,860	7,396	75
Household goods and furniture.....	1,184	1,700	62	227	260	49	121	46	2
Iron, pig and bloom.....	72,929	21,101	114	333	343	64	667	72	.....
Iron, steel and other.....	145,788	63,963	843	1,108	1,212	505	1,412	23	.....
Petroleum and other oils.....	8,176	37,287	152	956	912	505	372	24	.....
Sugar and salt.....	30,332	16,936	669	4,332	3,636	1,142	277	11	.....
Wines, liquors and beers.,	4,898	10,902	73	966	697	140	543	23	6
Merchandise not enumerated.....	436,034	153,341	14,059	13,908	8,385	2,833	9,252	1,003	94
Total.....	862,526	497,007	21,834	72,294	76,299	7,889	162,506	8,672	177
<i>Products of Mines.</i>									
Hard coal.....	601,208	278,184	99,128	4,500	9,662	447	.....	92	.....
Soft ".....	3,508,357	476,093	357	29,287	3,642	41,913	7,400	183	.....
Coke.....	.....	300	.....	300	.....	.....	.....	.....	.....
Copper ore.....	35,806	.....	.....	.....	.....	.....	.....	.....	.....
Iron ".....	28,440,952	164	23,547	4	.....	240	.....	30	.....
Other ".....	11,100	4,311	4,243	1,843	243	5,868	.....	374	.....
Total.....	32,597,423	759,052	127,275	35,934	13,547	48,468	7,400	679	.....
Grand totals (passengers and tonnage of vessels not included)....	36,395,687	2,760,752	669,299	385,261	134,881	85,951	177,941	46,263	8,283

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TABLE 7 (No. 1)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Sault Ste. Marie Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements	13,624								13,624		13,624	
All other animal		12								12		
Barley		20,569						90,299		117,687	80,149	37,538
Buckwheat			165									
Cement, bricks, &c.	139,279	1			10,125				149,561	1	149,561	
Coal, hard	4,808				468,739		113,391		586,908	14,300	601,208	601,208
" soft	158,527	3,350	15,200		2,423,778		814,858	53,610	3,412,363	95,994	3,508,357	3,508,357
Coke												
Corn								4,879		4,879	4,879	
Dressed meats												
Flax		10,329						24,862		69,792	52,075	17,717
Flour	138	181,571	10					85,958	148	282,978	253,873	29,253
Fruits and vegetables	314								314		314	
Hay	4,587	1,044			30				4,617	1,050	5,667	
Hides and leather	15	271						554	15	888	903	
Household goods	1,184								1,184		1,184	
Iron, pig and bloom	38,701				570		24,608		63,879	9,050	50,835	22,094
Iron and steel, all other	57,693	21,230	1,340		55,098		5,800		119,931	25,857	119,476	26,312
Live stock	41		6						47		47	
Merchandise	322,803	11,574	10,249		62,156		2,912		398,126	37,908	413,982	22,052
Oats		232,888						28,575		282,369	266,189	16,186
Other mill products	90	6,178							90	14,162	6,258	7,994
" packing house products		12								12		
" woods	2,662	65			373				3,035	639	2,995	679
Ore, all other								11,100		11,100		11,100
" copper								35,806		35,806	34,586	1,220
" iron								28,420,962		28,440,952	28,440,952	28,440,952
Peas												
Petroleum	4,206		79		1,950		1,864		8,099	77	6,264	1,912
Poultry, game and fish												
Potatoes	2								2		2	
Pulpwood										10,350	10,350	
Rye										3,780	700	3,080

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Sawed lumber.	2,230	2,357	22,179	884	31,605	1,908	90	5,022	59,141	64,163	49,733	11,430
Shingles			220		8,831		894		9,141	9,141	5,685	3,456
Square timber	7,051	555	160	11,527	713	3,912		11,123	2,162	13,285	9,048	4,237
Sugar and salt	17,590	85	1,075		30	25		30,217	115	30,332	25,612	4,720
Wheat		1,075,176	461,054		475,063		40,596		2,051	2,051,889	1,809,211	242,678
Wines, liquors and beers	4,419	15	364	60	40			4,843	55	4,898	4,648	250
Wool					394				394	394		
Total freight	779,961	1,567,285	28,648	3,035,290	29,332,862	969,248	117,058	4,813,147	31,582,540	36,395,687	3,578,268	33,017,419

TABLE 7 (No. 2)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Welland Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural implements	13,624								13,624		13,624			
All other animal		17,735				3,840				21,575			17,735	3,840
Barley														
Buckwheat														
Cement, bricks, &c.	99,541	8,954	292		2,000			200	101,833	9,154	110,987	108,287		2,700
Coal, hard	2,045				197,482	4,411	15,974	357,579	215,501	361,990	361,990			215,501
" soft								192		192	192			361,990
Coke								103,042		229,980	229,980			192
Corn						126,938								229,980
Dressed meats														
Flax		6,297	645						645	6,297	6,942	6,942		
Flour		28,593				11,859		700		41,152	41,152	29,293		11,859
Fruits and vegetables					50				50		50			50
Hay	841								841		841	841		
Hides and leather	15					233			15	233	248	15		233
Household goods	141							5	141		146	144		2
Iron, pig and bloom	17,576	386	1,419					993	18,995	1,379	20,374	19,393		981
Iron and steel, all other	18,933	1,217	1,944					15,113	20,877	16,330	37,207	22,214		14,993
Live stock														
Merchandise	101,604	23,023	21,240	1,289	52,080	15,478	255	7,483	175,179	47,273	222,452	146,520		75,932
Oats		133,856						2,377		136,233	136,233	136,233		
Other mill products		471	1,113			8,571		7,994	1,113	17,036	18,149	1,584		16,565
" packing house products														
" woods	17					1,583			17	1,583	1,600			1,600
Ore, all other	800					1,552			800	1,552	2,352	800		1,552
" copper								2,180		2,180	2,180			2,180
" iron								29,779		29,779	29,779			29,779
Peas						123				123	123			123
Petroleum	129	27,302	1,049		8			29,319	1,186	56,621	57,807	26,869		30,938
Poultry, game and fish					202				202		202			202
Potatoes														
Pulpwood	1,035		120,577						123,143		123,143	122,383		760
Rye					1,531									

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Sawed lumber..	4,440	5,191	11,738	21,372	21,372	8,402	12,970
Shingles.	80	500	25	525	525	500	25
Square timber.	3,417			8,017	8,097	2,367	5,730
Sugar and salt.	5,969	1,954		1,022	43,668	8,754	34,914
Wheat	486,309		10,717	587,493	587,493	514,282	73,211
Wines, liquors and beers.	511	4,379		2,127	10,068	9,759	309
Wool		5	233	233	238	5	933
Total freight.	265,790	154,617	197,301	1,601,456	2,326,290	1,196,946	1,129,344
				724,834			
				654,264			
				16,229			
				288,198			
				6,983			
				154,617			
				742,908			
				265,790			

TABLE (7) No. 3.—GENERAL STATEMENT showing the Quantity of each Through Article Transported on the Welland Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons		Total tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian	United States.
Agricultural implements	13,624								13,624				13,624	
All other animal														
Barley		17,735				3,840				21,575			17,735	3,840
Buckwheat														
Cement, bricks, &c	99,541	284	292		2,000		101,833		101,833	484			99,617	2,700
Coal, hard	2,045				197,482		215,501		215,501					215,501
" soft						4,411		357,579		361,990				361,990
Coke								192		192				192
Corn						126,938		103,042		229,980				229,980
Dressed meats														
Flax		6,297	645				645			6,297			6,942	
Flour		28,593						700		41,152			29,293	11,859
Fruits and vegetables					50						50			50
Hay	841								841				841	
Hides and leather	15								15	233			15	233
Household goods	141								141	5			144	2
Iron, pig and bloom	17,576		1,419				18,995		18,995	993			19,007	981
Iron and steel, all other.	18,933	225	1,944				20,877		20,877	7,920			21,222	7,575
Live stock														
Merchandise	101,086	3,242	21,240	1,289	52,080	15,478	174,661	255	174,661	27,492			126,221	75,932
Oats		133,856						2,977		136,233			136,233	
Other mill products		471	1,113			8,571	1,113	7,994		17,036			1,584	16,565
" packing house products.														
" woods	17						17			1,583				1,600
Ore, all other	800						800		800	1,552			800	1,552
" copper								2,180		2,180				2,180
" iron								29,779		29,779				29,779
Peas						123				123				123
Petroleum	129	27,392	1,049		8		1,186		1,186	56,621			26,869	30,938
Poultry, game and fish					202		202		202					202
Potatoes														
Pulpwood	1,065		129,577		1,531		123,143		123,143				122,383	760
Rye														
Sawed lumber		4,430		5,191		11,738				21,362			8,392	12,970
Shingles				500		25				525			500	25
Square timber		3,130						4,600		7,730			2,000	5,730

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Sugar and salt	5,969	397	1,954	..	34,723	625	42,646	1,022	43,668	8,754	34,914
Wheat	..	479,680	10,717	..	90,467	..	580,864	580,864	507,653	73,211
Wines, liquors and beers	3,440	511	4,379	..	122	..	..	1,616	7,941	2,127	10,068	9,759	309
Wool	..	..	5	..	..	233	..	..	5	233	238	5	233
Total freight	205,192	706,153	154,617	6,983	288,198	197,301	16,220	646,846	724,236	1,557,283	2,281,519	1,159,593	1,121,926

TABLE 7 (No. 5). GENERAL STATEMENT showing the Quantity of each Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	U. States.
Agricultural implements	228	18							228	18	246	
All other animal	1,163	6,657					3		1,166	6,657	7,820	3
Barley	1,523	20,131							1,523	20,131	21,654	
Buckwheat	644	394							644	394	1,038	
Cement, bricks, &c.	100,822	90,709							100,822	90,709	191,531	2,320
Coal, hard	9,114	2					350	268,718	9,461	268,720	8,942	269,242
" soft	145,948	11,551						318,591	145,948	330,145	157,502	318,591
Coke	300								300		300	
Corn	1,174	22,495						77,289	1,474	99,784	23,969	77,289
Dressed meats	26	21							26	21	47	
Flax	1,321	7,598							1,321	7,598	8,919	
Flour	2,043	32,607							2,043	32,607	34,650	
Fruits and vegetables	283	6,612							283	6,612	6,895	
Hay	6,514	5,229							6,514	5,229	11,743	
Hides and leather	41	56							41	36	77	
Household goods	662	1,036						2	662	1,038	1,698	2
Iron, pig and bloom	20,692	243		150				16	20,842	259	21,085	16
Iron and steel, all other	51,570	6,016		257				6,120	51,827	12,136	57,843	6,120
Live stock	84	919							84	919	1,003	
Morchaandise	110,251	27,517		6,852			181	8,210	117,616	35,727	141,374	11,969
Oats	4,490	136,229							4,480	136,229	138,992	1,717
Other mill products	8,306	7,112						1,549	8,306	11,961	11,035	6,232
" packing house products	292	73							292	73	365	
" wood	127	8,829		2,082			240		2,449	8,829	11,038	240
Ore, all other	1,063	248							4,063	248	1,151	2,860
" copper												
" iron	10	154							10	154	164	
Pots	101	45							101	45	146	
Petroleum	1,292	15,355		580				17,060	4,872	32,415	17,787	19,500
Poultry, game and fish	78	90							78	90	168	
Potatoes	91	591							91	594	685	
Pulpwood				264,062							264,062	

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Rye	140	321	10,577	22,235	5	487	140	321	461	259,175	461	492
Sawed lumber	40,653	185,710	185,710	185,710	45	45	51,235	208,432	259,667	259,175	461	492
Shingles	500	45	45	45	5	5	500	45	545	545	545	1,800
Square timber	14	26,962	26,962	26,962	14	14	14	28,762	28,776	26,976	16,742	194
Sugar and salt	15,398	1,512	1,512	1,512	15,398	15,398	15,398	1,538	16,936	16,742	16,742	194
Wheat	15,943	498,393	498,393	498,393	15,943	15,943	15,943	566,483	582,426	513,722	68,704	20
Wines, liquors and beers	7,626	1,741	1,741	1,741	7,626	7,626	7,626	1,761	10,902	10,882	10,882	20
Wool	16	13	13	13	16	16	16	13	29	29	29	20
Total freight	556,833	1,123,520	286,075	22,235	331	777	844,019	1,916,733	2,760,752	1,973,411	787,311	

TABLE 7 (No. 6). GENERAL STATEMENT showing the Quantity of each Through Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural implements.	7								7		7			
All other animal	5	4,457							5	4,457	4,462		4,462	
Barley		20,000								20,000	20,000		20,000	
Buckwheat		372								372	372		372	
Cement, bricks, &c	20,995	484							20,995	484	21,479		21,479	
Coal, hard	650							257,996	650	257,996	258,646		650	257,996
" soft.	6,701							308,334	6,701	308,334	315,035		6,701	308,334
Coke														
Corn		323						77,289		77,612	77,612		323	77,289
Dressed meats	10								10		10		10	
Flax	645	6,607							645	6,607	7,252		7,252	
Flour	187	27,081							187	27,081	27,268		27,268	
Fruits and vegetables	35	6,087							35	6,087	6,122		6,122	
Hay	216	7							216	7	223		223	
Hides and leather	39								39		39		39	
Household goods	382	806						2	382	808	1,190		1,188	2
Iron, pig and bloom	20,060	12						16	20,210	28	20,238		20,222	16
Iron and steel, all other	20,505	3,811						6,120	20,762	9,931	30,693		24,573	6,120
Live stock	2	24							2	24	26		26	
Merchandise	95,726	20,564						7,681	102,342	28,245	130,587		122,906	7,681
Oats	90	130,997							90	130,997	131,087		129,370	1,717
Other mill products	1,229	5,809						4,549	1,229	10,358	11,587		5,355	6,232
" packing house products.	40	25							40	25	65		65	
" woods		2							2,082	2	2,084		2,084	
Ore, all other.														
" copper														
" iron	10								10		10		10	
Peas	90								90		90		90	
Petroleum	925	15,021						17,060	1,505	32,081	33,586		16,526	17,060
Poultry, game and fish														
Potatoes	5	7							5	7	12		12	
Pulpwood									264,062		264,062		264,062	
Rye														
Sawed lumber								487	10,577	487	11,064		10,577	487

TABLE 7 (No. 7) —GENERAL STATEMENT showing the Quantity of each Way Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian	United States.
Agricultural implements.	221	18							221	18	239		239	
All other animal.	1,158	2,200					3		1,161	2,200	3,361		3,358	3
Barley	1,523	131							1,523	131	1,654		1,654	
Buckwheat.	644	22							644	22	666		666	
Cement, bricks, &c.	79,827	90,225							79,827	90,225	170,052		167,732	2,320
Coal, hard.	8,464	2					350	10,722	8,814	10,724	19,538		8,292	11,246
" soft.	139,247	11,554						10,257	139,247	21,811	161,058		150,801	10,257
Coke.	300								300		300		300	
Corn.	1,474	22,172							1,474	22,172	23,646		23,646	
Dressed meats	16	21							16	21	37		37	
Flax	676	991							676	991	1,667		1,667	
Flour.	1,856	5,526							1,856	5,526	7,382		7,382	
Fruits and vegetables	248	525							248	525	773		773	
Hay.	6,298	5,222							6,298	5,222	11,520		11,520	
Hides and leather	2	36							2	36	38		38	
Household goods.	280	230							280	230	510		510	
Iron, pig and bloom	632	231							632	231	863		863	
Iron and steel, all other	31,065	2,205							31,065	2,205	33,270		33,270	
Live stock.	82	895							82	895	977		977	
Merchandise.	14,525	6,953					184	529	15,274	7,482	22,756		18,468	4,288
Oats.	4,390	5,232							4,390	5,232	9,622		9,622	
Other mill products.	7,077	1,603							7,077	1,603	8,680		8,680	
" packing house products.	252	48							252	48	300		300	
" woods.	127	8,827					240		367	8,827	9,194		8,954	240
Ore, all other	4,063	248							4,063	248	4,311		1,451	2,860
" copper														
" iron.		154								154	154		154	
Peas.	11	45							11	45	56		56	
Petroleum.	3,367	334							3,367	334	3,701		1,261	2,440
Poultry, game and fish.	78	90							78	90	168		168	
Potatoes.	86	587							86	587	673		673	
Pulpwood														
Rye.	140	321							140	321	461		461	

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Sawed lumber.	40,653	185,710	22,235	5	40,658	207,945	248,603	248,598	5
Shingles.	500	45			500	45	545	545	
Square timber.	14	26,962			14	26,962	26,976	26,967	
Sugar and salt.	5,343	720			5,343	720	6,063	5,895	168
Wheat.	15,823	4,334			15,823	4,334	20,157	20,157	
Wines, liquors and beers.	984	12			984	12	996	996	
Wool.	6	8			6	8	14	14	
Total freight.	371,452	384,439	22,235	334	372,799	428,182	800,981	767,154	33,827

TABLE 7 (No. 8)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Chambly Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.				From Canadian to United States Ports.				From United States to United States Ports.				From United States to Canadian Ports.				Tons.		Total Tons.	Origin of Cargo.	
	Up.		Down.		Up.		Down.		Up.		Down.		Up.		Down.		Canadian.	United States.			
Agricultural implements.	116		2														116	2	118	118	
All other animal.	2		58														2	58	60	60	
Barley.	21		2														21	2	23	23	
Buckwheat.			2															2	2	2	
Cement, bricks, &c.	201		40														201	5,503	5,744	241	5,503
Coal, hard.	5		207														5	99,123	99,128	212	98,916
" soft.																					
Coke.																		357	357		357
Corn.	95		4														95	4	99	99	
Dressed meats.																					
Flax.																					
Flour.	1,083		34														1,083	34	1,117	1,117	
Fruits and vegetables.	628		2,052														628	2,009	2,697	2,680	17
Hay.	11,775		7,026														11,775	7,026	18,801	18,801	
Hides and leather.																					
Household goods.	40		22														40	22	62	62	
Iron, pig and bloom.	97		17														97	17	114	114	
Iron and steel, all other.	840		3														840	3	843	843	
Live stock.	7		222														7	226	233	229	4
Merchandise.	2,039		1,008														2,039	12,020	14,059	3,047	11,012
Oats.	34		488														34	488	522	522	
Other mill products.	240		7														240	7	247	247	
" packing house products.	80		18														80	18	98	98	
" woods.	20		1,044														20	1,044	1,064	1,064	
Ore, all other.																		4,243	4,243		4,243
" copper.																					
" iron.																					
Peas.	27		6														27	6	33	33	
Petroleum.	152																152		152	152	
Poultry, game and fish.	2		10														2	10	12	12	
Potatoes.	22																22		22	22	
Pulpwood.	364,717																364,717		364,717	364,717	
Rye.																					
Sawed lumber.	37		23														37	23	60	130,305	

TABLE 7 (No. 9).—GENERAL STATEMENT showing the Quantity of each Article Transported on the St. Peter's Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian	United States.
Agricultural implements.	11	1							11		11		12	
All other animal	2	1							2		2		3	
Barley.	7								7		7		7	
Buckwheat.	5								5		5		5	
Cement, bricks, &c.	409	2,230							409	2,230	2,639		2,639	
Coal, hard.	218							229	447		447		218	229
" soft.	17	41,896							17	41,896	41,913		41,913	
Coke														
Corn	3								3		3		3	
Dressed meats	19								19		19		19	
Flax.														
Flour.	1,934	1							1,934	1	1,935		1,935	
Fruits and vegetables	974								974		974		974	
Hay.	2,996								2,996		2,996		2,996	
Hides and leather	4	2							4	2	6		6	
Household goods	49								49		49		49	
Iron, pig and bloom	64								64		64		64	
Iron and steel, all other.	254	251							254	251	505		505	
Live stock.	35								35		35		35	
Merchandise.	2,647	186							2,647	186	2,833		2,833	
Oats.	4,569								4,569		4,569		4,569	
Other mill products	627								627		627		627	
" packing house products.	206								206		206		206	
" woods.	428	211							428	211	639		639	
Ore, all other	955	4,913							955	4,913	5,868		5,868	
" copper														
" iron.	2	238							2	238	240		240	
Peas.														
Petroleum.	414	91							414	91	505		505	
Poultry, game and fish.	128	2,200							128	2,200	2,328		2,328	
Potatoes	5,734	2							5,734	2	5,736		5,736	
Pulpwood														
Rye.	19								19		19		19	
Sawed lumber.	8,165	3							8,165	3	8,168		8,168	

TABLE 7 (No. 10).—GENERAL STATEMENT showing the Quantity of each Article Transported on the Murray Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	From Canadian to Canadian Ports.		From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.														
All other animal.	30	2							30	2			2	
Barley		23								23			53	
Buckwheat														
Cement, bricks, &c.	149,860								149,860		149,860		149,860	
Coal, hard		297												
" soft.								7,103			7,400		297	7,103
Coke														
Corn														
Dressed meats.														
Flax													29	
Flour.														
Fruit and vegetables.	1,645	2,602							1,645	2,602	4,247		4,247	
Hay														
Hides and leather														
Household goods.	71	50							71	50	121		121	
Iron, pig and bloom.		667								667	667		667	
Iron and steel, all other.	1,135	277							1,135	277	1,412		1,412	
Live stock.														
Merchandise	5,514	3,738							5,514	3,738	9,252		9,250	2
Oats.														
Other mill products	118	30							118	30	148		148	
" packing house products.	10	42							10	42	52		52	
" woods.	354								354		354		354	
Ore, all other														
" copper.														
" iron.														
Peas														
Petroleum.	85	287							85	287	372		261	111
Poultry, game and fish.	10								10		10		10	
Potatoes														
Pulpwood	360			555					915		915		915	
Rye.														
Sawed lumber.	2,095	18							2,095	18	2,113		2,113	

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Shingles.....	80	9	80	89
Square timber...	222	55	222	232	45
Sugar and salt.....	20	20	20
Wheat.....	128	415	128	543
Wines, liquors and beers..	.....	5	.....	.....	.....	5	.....	.....	.....
Wool.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total freight.....	161,737	8,546	555	7,103	162,292	15,649	177,941	170,680	7,261

TABLE 7 (No. 11).—GENERAL STATEMENT showing the Quantity of each Article Transported on the Ottawa Canals during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian	United States.
Agricultural implements	184	12	...	...	...	...	184	12	196	...	196	...
All other animal	93	2,132	...	...	...	...	93	2,132	2,225	...	2,225	...
Barley	13	6	...	...	...	...	13	6	19	...	19	...
Buckwheat	4	...	...	...	...	...	4	...	4	...	4	...
Cement, bricks, &c	1,033	48,879	...	...	356	...	1,033	48,879	50,268	...	49,912	356
Coal, hard	636	...	...	...	3,861	...	1,500	...	4,500	...	449	4,051
" soft	29,287	...	...	...	...	...	29,287	...	29,287	...	29,287	...
Coke	300	...	...	...	...	...	300	...	300	...	300	...
Corn	77	...	...	...	...	...	77	...	77	...	27	...
Dressed meats	2	...	...	...	...	...	2	...	2	...	2	...
Flax	...	...	...	...	...	...	...	...	...	...	...	...
Flour	721	52	...	...	...	...	721	52	773	...	773	...
Fruits and vegetables	199	250	...	...	...	...	199	250	449	...	449	...
Hay	...	2,244	...	...	...	...	...	2,244	2,244	...	2,244	...
Hides and leather	1	10	...	...	...	...	1	10	11	...	11	...
Household goods	164	63	...	...	...	...	164	63	227	...	227	...
Iron pig and bloom	318	15	...	...	...	...	318	15	333	...	333	...
Iron and steel, all other	1,092	16	...	...	...	...	1,092	16	1,108	...	1,108	...
Live stock	38	611	...	...	...	...	38	611	649	...	649	...
Merchandise	7,542	3,693	...	...	2,673	...	10,215	3,693	13,908	...	11,235	2,673
Oats	14	548	...	...	...	...	14	548	562	...	562	...
Other mill products	268	648	...	...	...	...	268	648	916	...	916	...
" packing house products	243	24	...	...	...	...	243	24	267	...	267	...
" woods	225	12,712	...	...	...	...	225	12,712	43,299	...	43,299	...
Ore, all other	900	30	...	...	913	...	1,813	30	1,843	...	930	913
" copper	...	...	...	...	...	...	...	...	...	...	...	...
" iron	...	4	...	...	...	...	...	4	4	...	4	...
Peas	...	...	...	...	...	...	...	...	...	...	...	...
Petroleum	792	164	...	...	...	...	792	164	956	...	956	...
Poultry, game and fish	...	88	...	...	...	...	...	88	88	...	88	...
Potatoes	16	471	...	...	...	...	16	471	487	...	487	...
Pulpwood	...	...	...	...	...	...	...	...	...	...	...	...
Rye	2	...	...	...	...	...	2	...	2	...	2	...

TABLE 7 (No. 12).—GENERAL STATEMENT showing the Quantity of each Article Transported on the Rideau Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian	United States.
Agricultural implements.	285	177							285	177	462		462	
All other animal.	518	1,326							518	1,326	1,844		1,844	
Barley.		45								45	45		45	
Buckwheat.														
Cement, bricks, &c.	29,171	13,217	4						29,175	31,217	60,392		60,392	
Coal, hard.	8	26					925	8,703	933	8,729	9,662		10	9,652
" soft.	227	16						3,399	227	3,415	3,642		229	3,413
Coke.														
Corn.	6	311							5	311	316		256	60
Dressed meats.	4	18							4	18	22		22	
Flax.		1								1	1		1	
Flour.	88	260							88	260	348		348	
Fruits and vegetables.	325	75							325	75	400		400	
Hay.	361	18							361	18	379		379	
Hides and leather.	3	1							3	1	4		4	
Household goods.	132	128							132	128	260		260	
Iron, pig and bloom.	221	122							221	122	343		343	
Iron and steel, all other.	1,025	187							1,025	187	1,212		1,212	
Live stock.	8	5							8	5	13		13	
Merchandise.	4,818	2,854					535	178	5,353	3,032	8,385		7,672	713
Oats.		426								426	426		426	
Other mill products.	42	265							42	265	307		307	
" packing house products.	199	34							199	34	233		233	
" woods.	6,599	1,008							6,599	1,008	7,607		7,607	
Ore, all other.	9	234							9	234	243		243	
" copper.														
" iron.														
Peas.	1								1		1		1	
Petroleum.	583	329							583	329	912		912	
Poultry, game and fish.	4	3							4	3	7		7	
Potatoes.	15	3							15	3	18		18	
Pulpwood.	552	1,497							552	1,497	2,049		2,049	
Rye.		2								2	2		2	
Sawed lumber.	8,384	15,218							8,384	21,088	29,472		29,472	

TABLE 7 (No. 13).—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural Implements	21	53							21	53	74		74	
All other animal	93	58							93	58	151		151	
Barley	6								6		6		6	
Buckwheat														
Cement, bricks, &c	7,126	270							7,126	270	7,396		7,396	
Coal, hard	92								92		92		92	
" soft	68	115							68	115	183		183	
Coke														
Corn		2								2	2		2	
Dressed meats		1								1	1		1	
Flax														
Flour	43	43							43	43	86		86	
Fruits and vegetables														
Hay	48	2							48	2	50		50	
Hides and leather		12								12	12		12	
Household goods	37	9							37	9	46		46	
Iron, pig and bloom	32	40							32	40	72		72	
Iron and steel, all other	20	3							20	3	23		23	
Live stock	243	27							243	27	270		270	
Merchandise	650	353							650	353	1,003		1,003	
Oats	18								18		18		18	
Other mill products	16	46							16	46	62		62	
" packing house products														
" woods	5,770	21,602							5,770	21,602	27,372		27,372	
Ore, all other		374								374	374		374	
" copper														
" iron	30								30		30		30	
Peas	30	7							30	7	37		37	
Petroleum	19	5							19	5	24		24	
Poultry, game and fish														
Potatoes	131	1							131	1	132		132	
Pulpwood	110	5,853							110	5,853	5,963		5,963	
Rye	6								6		6		6	

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Sawed lumber	720	1,062	720	1,062	1,782
Shingles	51	138	51	138	189
Square timber	26	517	26	517	543
Sugar and salt	11	. . . . .	. . . . .	. . . . .	11	. . . . .	. . . . .	11	. . . . .
Wheat	229	. . . . .	. . . . .	. . . . .	229	. . . . .	. . . . .	229	. . . . .
Wines, liquors and beers	19	4	19	4	23
Wool	1	1	1
Total freight	15,665	30,598	15,665	30,598	46,263

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TABLE 8.—STATEMENT showing the Classified Tonnage of all kinds of Vessels
SAULT STE.

CANADIAN.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 5,142 tons	1	5,142	1	5,000 to — tons		
2	4,000 " 5,000 "	1	4,500	2	4,000 " 5,000 "		
3	3,000 " 4,000 "	2	7,000	3	3,000 " 4,000 "		
4	2,000 " 3,000 "	8	18,500	4	2,000 " 3,000 "		
5	1,000 " 2,000 "	64	80,500	5	1,000 " 2,000 "		
6	Under 1,000 "	50	12,090	6	Under 1,000 "	26	7,070
Total.....		126	127,732	Total		26	7,070

WELLAND

1	250 to 1,665 tons	65	72,766	1	250 to 1,226 tons	9	7,720
2	200 " 249 "	3	625	2	200 " 249 "	3	625
3	150 " 199 "	2	320	3	150 " 199 "	2	365
4	100 " 149 "	3	370	4	100 " 149 "	10	1,060
5	50 " 99 "	5	380	5	50 " 99 "	3	205
6	Under 50 "	24	634	6	Under 50 "	1	15
Total		104	75,095	Total		28	9,990

ST. LAWRENCE

1	250 to 1,665 tons	74	69,492	1	250 to 1,000 tons	104	51,965
2	200 " 249 "	4	820	2	200 " 249 "	8	1,620
3	150 " 199 "	14	2,400	3	150 " 199 "	75	12,030
4	100 " 149 "	15	1,810	4	100 " 149 "	92	10,340
5	50 " 99 "	56	3,885	5	50 " 99 "	42	3,260
6	Under 50 "	79	1,485	6	Under 50 "	17	608
Total		242	79,892	Total		338	79,823

RIDEAU, OTTAWA

1	250 to 492 tons.....	3	1,162	1	250 to 350 tons	1	350
2	200 " 249 "	2	400	2	200 " 249 "	7	1,480
3	150 " 199 "	4	650	3	150 " 199 "	49	7,970
4	100 " 149 "	5	575	4	100 " 149 "	44	5,595
5	50 " 99 "	7	470	5	50 " 99 "	14	895
6	Under 50 "	32	575	6	Under 50 "	12	290
Total.....		53	3,832	Total.....		127	16,580

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passed through the following during the Season of Navigation in 1910.

MARIE CANAL.

UNITED STATES.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 6,498 tons	104	546,000	1	5,000 to — tons	—	—
2	4,000 " 5,000 "	65	275,000	2	4,000 " 5,000 "	3	12,500
3	3,000 " 4,000 "	138	452,500	3	3,000 " 4,000 "	13	40,500
4	2,000 " 3,000 "	56	120,000	4	2,000 " 3,000 "	10	21,000
5	1,000 " 2,000 "	54	75,500	5	1,000 " 2,000 "	7	9,000
6	Under 1,000 "	93	112,750	6	Under 1,000 "	24	10,950
	Total	510	1,581,750		Total	57	93,950

CANAL.

1	250 to 1,691 tons	33	39,916	1	250 to 1,599 tons	3	3,908
2	200 " 249 "	—	—	2	200 " 249 "	1	200
3	150 " 199 "	—	—	3	150 " 199 "	—	—
4	100 " 149 "	1	100	4	100 " 149 "	—	—
5	50 " 99 "	9	630	5	50 " 99 "	1	75
6	Under 50 "	24	335	6	Under 50 "	4	71
	Total	67	40,981		Total	9	4,234

CANAL.

1	250 to 1,552 tons	24	21,331	1	250 to 1,590 tons	16	9,968
2	200 " 249 "	—	—	2	200 " 249 "	1	200
3	150 " 199 "	2	340	3	150 " 199 "	—	—
4	100 " 149 "	5	590	4	100 " 149 "	45	4,670
5	50 " 99 "	7	460	5	50 " 99 "	75	6,925
6	Under 50 "	36	395	6	Under 50 "	—	—
	Total	74	23,116		Total	137	21,763

AND CHAMBLY CANALS.

1	250 to — tons	—	—	1	250 to 250 tons	1	250
2	200 " 249 "	—	—	2	200 " 249 "	1	200
3	150 " 199 "	—	—	3	150 " 199 "	11	1,710
4	100 " 149 "	—	—	4	100 " 149 "	382	40,260
5	50 " 99 "	—	—	5	50 " 99 "	254	23,905
6	Under 50 "	—	—	6	Under 50 "	—	—
	Total	—	—		Total	649	66,325

APPENDIX
DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)

	Miles.
1. Lachine canal..	8½
Lake St. Louis and River St. Lawrence..	16
2. Soulanges canal..	14
Lake St. Francis and River St. Lawrence..	33
3. Cornwall canal..	11
River St. Lawrence..	5
4. Farran's Point canal..	1½
River St. Lawrence..	10
5. Rapide Plat canal..	3¾
River St. Lawrence..	4
6. Galops canal..	7½
River St. Lawrence and Lake Ontario..	236
7. Welland canal..	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal..	1¼
Lake Superior to Port Arthur..	266
Total..	1,223 ¹⁷ / ₂₄
To Duluth..	1,357
Chicago..	1,286

Second.—Ottawa to Lake Champlain.

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

Third.—Ottawa to Kingston and Perth.

1. Rideau canal.

Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.

1. Trent canal (not completed).

Fifth.—Ocean to Bras d'Or lakes.

1. St. Peter's canal.

RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

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LACHINE CANAL.

First construction commenced.....	1821
" completed.....	1825
First enlargement commenced.....	1843
" completed.....	1848
Second enlargement commenced.....	1873
" completed.....	1901
Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimensions of locks.....	270 feet by 45 feet.
Total rise of lockage.....	45 feet.
Depth of water } at two locks.....	18 "
on sills. - } at three locks.....	14 "
Average width of new canal.....	150 "

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Construction commenced.....	1892
Open for traffic.....	1899
Length of canal.....	14 statute miles.
Number of locks } lift.....	4
} guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise of lockage.....	84 feet
Depth of water on sills.....	15 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	164 "
Number of arc lights.....	219 of 2,000 c. p. each.

The canal extends from Cascade point to Coteau Landing, overcoming the Cascade Rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

CORNWALL CANAL.

First commenced, 9 feet.....	1844
" opened.....	1847
Enlargement commenced.....	1897
" completed.....	1900
Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 75 feet.
Total rise of lockage.....	48 feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	164 "

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The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis, of 32½ miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

FARRAN'S POINT CANAL.

First commenced, 9 feet	1844
“ opened	1847
Enlargement commenced.. .. .	1897
“ completed.. .. .	1900
Length of canal.. .. .	1½ miles.
Number of locks	1
New lock	800 feet by 45 feet
Old lock	200 “
Total rise or lockages	3½ feet.
Depth of water on sills of new lock	14 “
Depth of water on sills of old lock	9 “
Breadth of canal at bottom	90 “
Breadth of canal at water surface.. .. .	154 “

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

First commenced, 9 feet	1844
“ opened	1847
Enlargement commenced	1884
“ completed	1897
Length of canal.. .. .	3½ miles.
Number of locks	2
Dimensions of locks	270 feet by 45 feet.
Total rise in lockage.. .. .	11½ feet.
Depth of water on sills.. .. .	14 “
Breadth of canal at bottom.. .. .	80 “
Breadth of canal at surface of water.	152 “

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal, there is a navigable stretch of 10½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

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GALOPS CANAL.

First commenced, 9 feet.....	1844
Opened.....	1846
Enlargement commenced.....	1888
" completed.....	1903
Length of canal.....	7½ miles.
Number of locks.....	3
Dimensions of locks. { one of which is }	2-270 by 45.
{ a guard lock. }	1-800 by 45.
Total rise of lockage.....	15½ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Construction begun.....	1882
Completed.....	1890
Length between eastern and western pier heads.....	5½ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120
Depth below lowest known lake level.....	11
No locks.	

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinte and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

	Old Line.	Enlarged or New Line.
Length of Canal..	27½ miles	26¾ miles
Pairs of guard-gates (formerly 3) .. ..	..	2
Number of locks { lift.....	26	25
{ guard.....	1	1
Dimensions..... { 1 lock 200 x 45 1 lock 200 x 45 1 (tidal) 230 x 45 24 locks 150 x 45 }		270 feet x 45 feet.
Total rise or lockage	326¾ feet	326¾ feet.
Depth of water on sills.. . . .	10¼ "	14 "
Construction commenced, 10 feet 3 inches.. . . .		1824
" Completed.. . . .		1833
Enlargement commenced, 14 feet.. . . .		1872
" completed.. . . .		1887

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WELLAND RIVER BRANCHES.

Length of canal—	
Port Robinson cut to River Welland	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct	300 “
Chippewa cut to River Niagara.. .. .	1,020 “
Number of locks—one at Aqueduct and one at Port Robinson.. .. .	2
Dimensions of locks.. .. .	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland.. .. .	10 feet.
Depth of water on sills.. .. .	9 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal .. .	21 miles.
Number of locks.. .	2
Dimensions of locks.	{ 1 of 150 by 26½ feet. 1 of 200 by 45 feet.
Total rise or lockage .. .	
Depth of water on sills.. .	7 to 8 feet.
	9 feet.

PORT WELLAND BRANCH.

Length of canal .. .	1¼ miles.
Number of locks.. .	1
Dimensions of locks .. .	185 feet by 45 feet.
Total rise or lockage .. .	7½ feet.
Depth of water on sills.. .	11 “

The Welland canal has two entrances from Lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¼ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Construction commenced.. .	1888
Opened for traffic.. .	1895
Length of canal, between the extreme ends of the entrance piers.. .	5,967 feet.
Number of locks.. .	1
Dimensions of locks.. .	900 feet by 60 feet.
Depth of water on sills (at lowest known water level) .. .	20 feet 3 inches.
Total rise or lockage.. .	18 feet.
Breadth of canal at bottom .. .	141 feet 8 inches.
Breadth at surface of water .. .	150 feet.

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This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245½ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

Ottawa River Canals.

The Ste. Anne's lock.	Grenville canal.
Carillon canal.	Rideau canal.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Interme- diate Distance.	Total Distance, from Montreal.
	Miles.	Miles.
The Lachine canal.	8½	
From Lachine to Ste. Anne's lock.	15	23
Ste. Anne's lock and piers	1	23
Ste. Anne's lock to Carillon canal	27	50
The Carillon canal	1	51
The Carillon to Grenville canal	6½	57
The Grenville canal	5½	63
From the Grenville canal to entrance of Rideau navigation	56	119
Rideau navigation ending at Kingston	126½	245

STE. ANNE'S LOCK.

Construction commenced	1814.
“ completed	1816
Rebuilt of wood	1833
“ in masonry	1843.

	Old Lock.	New Lock.
Length of canal	½ mile.	½ mile.
Number of locks	1	1
Dimensions of locks	190 x 45 feet.	200 x 45 feet.
Total rise or lockage	3 feet.	3 feet.
Depth of water on sills	6 “	9 “

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

THE CARILLON CANAL.

Construction commenced..	1819
“ completed..	1833
Enlargement commenced..	1871
“ completed..	1887
Length of canal..	$\frac{3}{4}$ mile.
Number of locks..	2
Dimensions of locks..	200 x 45 feet.
Total rise or lockage..	16 feet.
Depth of water on sills..	9 “
Breadth of canal at bottom..	100 “
Breadth of canal at water surface..	110 “

This canal overcomes the Carillon rapids.

From Ste. Anne’s lock to the foot of the Carillon canal there is navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.
By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Construction commenced..	1819
“ completed..	1833
Enlargement commenced..	1871
“ completed..	1887
Length of canal..	$5\frac{3}{4}$ miles.
Number of locks..	5
Dimensions of locks..	200 x 45 feet.
Total rise or lockage..	$43\frac{3}{4}$ feet.
Depth of water on sills..	9 “
Breadth of canal at bottom..	40 to 50 feet.
Breadth of canal at surface of water..	50 to 80 “

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

Construction commenced..	1826
“ completed..	1832

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters..	126 $\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston. {	35 ascending. 14 descending.
Total lockage..... $446\frac{1}{2}$ feet { $282\frac{1}{4}$ rise and 164 fall }	at high water.
Dimensions of locks..	134 x 33 feet.
Depth of water on sills..	5 feet.
Navigation depth through the several reaches.. . .	$4\frac{1}{2}$ “
Breadth of canal reaches at bottom.. {	60 feet in earth. 54 feet in rock.
Breadth of canal at surface of water..	80 feet in earth.

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PERTH BRANCH.

Construction commenced..	1883
“ completed..	1892
Length of canal..	7 miles.
Number of locks..	2
Dimensions of locks..	134 feet x 33 feet.
Total rise or lockage..	26 “
Depth of water on sills..	5 “ 6 inches.
Length of dam..	200 “
Breadth of canal at bottom..	40 “
Breadth of canal at surface of water..	<div> <div>{</div> <div>40 “ in rock.</div> <div>60 “ in clay.</div> </div>

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau and the town of Perth.

The summit level of the Rideau system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

1. The summit level, supplied by the Wolfe lake system.
2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau.
3. The southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow into Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through the St. Ours lock to the basin of Chambly; thence, by the Chambly canal, to St. Johns, and up the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York:—

Section of Navigation.	Interme- diate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours lock.	14	14
St. Ours lock to Chambly canal...	32	46
Chambly canal...	12	58
Chambly canal to boundary line	23	81
Boundary line to Champlain canal...	111	192
Champlain canal to junction with Erie canal...	66	258
Erie canal, from junction to Albany.	7	265
Albany to New York	146	411

ST. OURS LOCK DAM.

Construction commenced..	1844
“ completed..	1849
Length..	$\frac{1}{8}$ mile.
Number of locks..	1
Dimensions of lock..	200 feet by 45 feet.
Total rise of lockage..	5 “
Depth of water on sills..	7 feet at low water.
Length of dam in eastern channel..	300 “
Length of dam in western channel..	690 “

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Construction commenced..	1831
“ completed..	1843
Length of canal..	12 miles.
Number of locks..	9
Dimensions of locks:—	
Guard lock, No. 1 at St. Johns.....	122 feet.
Lift “ 2	124 “
“ “ 3, 4, 5, 6	118 “
“ “ 7, 8, 9 combined	125 “
Total rise or lockage..	74 “
Depth of water on sills..	7 “
Breadth of canal at bottom..	36 “
Breadth of canal at surface of water..	60 “

From 22½ to 24 feet wide.

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

TRENT CANAL.

The term ‘Trent canal’ is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian bay, Lake Huron; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these

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waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:—

From Trenton, Bay of Quinté to Nine Mile rapids ..	—	9
Nine Mile rapids to Percy landing.. . . .	19½	—
Percy landing to Heeley's Falls dam.. . . .	—	14½
Heeley's Falls dam to Peterborough.. . . .	51¾	—
Peterborough to Lakefield.. . . .	—	9½
Lakefield to a point across Balsam lake.. . . .	61	—
	<hr/> 132¼	<hr/> 33

Total distance, Bay of Quinté to a point across Balsam lake.. 165¼

From Sturgeon point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog.. . . . 27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchewanoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1	Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill.		
2	Locks at Fenelon....	134' x 33' x 5' 0" to 7' 6" depth water on mitre sill.	
1	" Lindsay ..	134' x 33' x 5' 0" to 7' 6"	" "
1	" Bobcaygeon ..	134' x 33' x 5' 8" to 7' 0"	" "
1	" Buckhorn ..	134' x 33' x 5' 0" to 9' 0"	" "
1	" Lovesick ..	134' x 33' x 5' 0" to 9' 4"	" "
2	" Burleigh ..	134' x 33' x 6' 0" to 8' 0"	" "
1	" Young's point.	134' x 33' x 5' 0" to 14' 0"	" "
1	" Peterborough .	134' x 33' x 5' 0" to 10' 0"	" "
1	" Hastings ..	134' x 33' x 7' 0" to 10' 6"	" "
1	" Chisholms ..	134' x 33' x 5' 0" to 8' 6"	" "

ST. PETER'S CANAL, CAPE BRETON.

Construction commenced..	1854
“ completed..	1869
Enlargement begun..	1875
“ completed..	1881
Length of canal..	About 2,400 feet.
Breadth at water line..	50 feet.
Lock..	One tidal lock, 4 pairs of gates.
Dimensions..	200 feet by 48 feet.
Depth of water on sills..	18 feet at lowest water.
Depth through canal..	19 “
Extreme rise and fall of tide in St. Peter's bay..	4 “

This canal connects St. Peter's bay on the northern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

BEAUHARNOIS CANAL.

Construction begun..	1842
“ completed..	1845
Length of canal..	12 statute miles.
Number of locks..	9
Dimensions of locks..	200 feet by 45 feet.
Total rise or lockage..	82½ “
Depth of water on sills..	9 “
Breadth of canal at bottom..	80 “
Breadth of canal at water surface..	120 “

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

EARLIER CANALS.

A system of three canals preceded the Bearharnois. These were:—

COTEAU DU LAC CANAL.

Construction commenced..	1779
“ completed..	1780

SPLIT ROCK CANAL.

Construction commenced..	1779
“ completed..	1780

CASCADE POINT CANAL.

Construction commenced..	1782
“ completed..	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

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Two canals were also constructed off Burlington Bay, Ontario. They were:—

BURLINGTON BAY CANAL.

Construction commenced..	1825
“ completed..	1832

DESJARDINS CANAL.

Construction commenced..	1826
“ completed..	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was $7\frac{1}{2}$ feet. .

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ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR
BY WATER.

		Sections of Navigation.	Statute Miles.	
From	To		Inter- mediate.	Total to Straits of Belle-Ile.
Straits of Belle Ile ..	Cape Whittle ..	Gulf of St. Lawrence ...	240	240
Cape Whittle.....	West Point, Anticosti.....	" ..	201	441
West Point, Anticosti ..	Father Point.....	River St. Lawrence...	202	643
Father Point.....	Rimouski ..	" ..	6	649
Rimouski.....	Bic..	" ..	12	661
Bic.	Isle Verte ..	" ..	39	700
Isle-Verte (opp. Saguenay).	Quebec... ..	" ..	126	826
Quebec.....	Three Rivers.	" to tide-water.	74	900
Three Rivers.	Montreal ..	" ..	86	986
Montreal.....	Lachine ..	Lachine Canal ..	8½	994½
Lachine ..	Cascade Point ..	Lake St. Louis.....	16	1,009½
Cascade Point ..	Coteau Landing..	Soulanges Canal ..	14	1,021
Coteau Landing. . .	Cornwall.....	Lake St. Louis.....	30	1,053
Cornwall.....	Dickinson's Landing...	Cornwall Canal..	11½	1,065
Dickinson's Landing ..	Farran's Point.....	River St. Lawrence.....	5	1,070½
Farran Point.. ..	Upper end of Croyle's Island..	Farran's Point.....	½	1,071
Upper end Croyle's Island.	Williamsburg or Morrisburg...	River St. Lawrence.....	10½	1,081½
Williamsburg ..	Rapide Plat ..	Rapide Plat Canal ..	4	1,085½
Rapide Plat....	Point Iroquois Village.	River St. Lawrence....	4½	1,090
Point Iroquois Village.....	Upper end Presqu'Île.....	Point Iroquois Canal ..	3	1,093
Presqu-Île.....	Point Cardinal, Edwardsburg..	Junction Canal.....	2½	1,095½
Point Cardinal.....	Head of Galops Rapids ..	Galops Canal... ..	2	1,097½
Galops Rapids ..	Prescott.	River St. Lawrence....	7½	1,105
Prescott... ..	Kingston.....	" ..	59	1,164
Kingston... ..	Port Dalhousie.....	Lake Ontario ..	170	1,334
Port Dalhousie ..	Port Colborne..	Welland Canal ..	26½	1,360½
Port Colborne ..	Amherstburg ..	Lake Erie ..	232	1,592½
Amherstburg..	Windsor ..	River Detroit ..	18	1,610½
Windsor... ..	Foot of St. Mary's Island ..	Lake St. Clair ..	25	1,635½
Foot of St. Mary's Island..	Sarnia ..	River St. Clair.	33	1,668½
Sarnia ..	Foot of St. Joseph Island..	Lake Huron.....	270	1,938½
Foot of St. Joseph's Island.	Foot of Sault Ste. Marie..	River Ste. Marie.....	47	1,985½
Sault-Ste. Marie.....	Head of Sault Ste. Marie.	Sault Ste. Marie Canal..	1	1,986½
Head of Sault Ste. Marie..	Point aux Pins....	River Ste. Marie ..	7	1,993½
Pointe aux Pins.....	Port Arthur.	Lake Superior.....	266	2,259½
Port Arthur to Lake Shebandowan.....			45	
Lake Shebandowan to North-west Angle.....			312	
North-west Angle to Winnipeg... ..			95	
Pointe aux Pins to Duluth... ..			390	

Of the 2,259½ miles from the Straits of Belle-Ile to the head of Lake Superior, 73½ miles are artificial navigation, and 2,188½ open navigation.
Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.
The total fall from Lake Superior to tide-water is about 600 feet.
The steamboat voyage from Collingwood to Port Arthur is 532 miles.
" " Depot Harbour to Port Arthur is 510 miles; to Duluth is 644 miles; to Chicago 525 miles, and to Milwaukee, 442 miles.

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TABLE of distances of Stations between the cities of Ottawa and Kingston.

No. of Station.	Name of Station.	Distances from Ottawa.	Locks.		Dams.			Length of Arti- ficial Canal at each Station in miles.	
			No.	Lift at Low water.	No.	Length.	Height.		
				Rise. Ft. In.					Feet.	Feet.
		Miles.							
1	Ottawa.....	0	8	82 0	3	{ 230 1,320 1,616	13 33 14	4.00	
2	Hartwell's ..	4 $\frac{1}{4}$	2	22 0	...		100		28
3	Hogsback.....	5 $\frac{1}{2}$	2	13 6	1		320		60
4	Black Rapids.....	9 $\frac{1}{2}$	1	10 0	1		300		12
5	Long Island.....	14 $\frac{3}{4}$	3	27 0	3		850		68
6	Burritt's.....	40 $\frac{3}{4}$	1	10 6	1	240	14	1.50	
7	Nicholson.....	43 $\frac{3}{4}$	2	15 2	1	500	9	0.50	
8	Clowes.....	44 $\frac{1}{2}$	1	10 6	1	481	16	0.05	
9	Merrickville.....	46 $\frac{3}{4}$	3	25 0	1	150	6	0.33	
10	Maitland.....	55	1	4 9	1	270	8	0.13	
11	Edmunds.....	59 $\frac{1}{2}$	1	10 10	1	343	8	0.06	
12	Old Sly.....	60 $\frac{1}{2}$	2	15 6	1	250	20	0.25	
13	Smith's Falls.....	61 $\frac{1}{2}$	4	33 9	2	600	24	0.13	
14	First Rapids or Poonamalie.....	64	1	7 9	1	260	5	1.25	
15	Narrows.....	83 $\frac{1}{4}$	1	4 0	1	600	9	0.06	
	Total rise at low water.....			292 3					
				Fall					
16	Isthmus.....	87 $\frac{1}{2}$	1	4 0	.....	.....	.....	1.25
17	Chaffey.....	92	1	12 6	.....	.....	.....	0.13
18	Davis.....	94 $\frac{1}{2}$	1	9 0	1	300	15	0.06	
19	Jones' Falls ..	97 $\frac{1}{4}$	4	60 0	1	300	60	0.25	
20	Brewer's Upper Mills.....	108 $\frac{1}{4}$	2	19 0	1	200	20	1.75	
21	" Lower Mills.....	110	1	14 2	1	200	12	4.25	
22	Kingston Mills..	120 $\frac{1}{4}$	4	46 8	1	6,042	14	0.25	
23	Kingston.....	126 $\frac{1}{4}$							
	Total fall at low water			165 4					
	Total		47		24	15,472		16.46	

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